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<211> 2913

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<211> 1643

<212> DNA

<213> Homo sapiens

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<210> 29
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<220>
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<211> 2307

<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(2307)
<223> any n = a,c,g,t any unknown or other

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<210> 32
<211> 1712
<212> DNA
<213> Homo sapiens

<220>
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 <223> any n = a,c,g,t any unknown or other

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 <211> 1068
 <212> DNA
 <213> Homo sapiens

<220>
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 <222> (1)..(1068)
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<210> 34
<211> 1388
<212> DNA
<213> Homo sapiens

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<220>
<221> misc_feature
<222> (1)..(1388)
<223> any n = a,c,g,t any unknown or other

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<210> 35
<211> 1452
<212> DNA
<213> Homo sapiens

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<220>
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<223> any n = a,c,g,t any unknown or other

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<400> 35

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ctgggtgatgc cgttcattggg caccgacctg ggcaagctca tgaaacatga gaagctaggc 360
gaggaccgga tccagttcct cgtgtaccag atgctgaagg ggctgaggta tatccacgct 420
gccggcatca tccacagagt gagtcccgtt ggagaagccg ctcacagacc ctccccagt 480
gcaatcccc cgctccacg tcccacctgt gaggatgtga tggggtctgg gtgctgagcc 540
acgcctatg cacagcccct ggtgggaacc tgctgggtg cccaggacct gaagcccggc 600
aacctggctg tgaacgaaga ctgtgagctg aagatcctgg acttcggcct ggccaggcag 660
gcagacagtg agatgactgg gtacgtgggtg acccgggtgg accgggctcc cgaggctcatc 720
ttgaattgga tgcgctacac gcagacgggtg gacatctggt ctgtgggctg catcatggcg 780
gagatgatca caggcaagac gctgttcaag ggcagcgacc acctggacca gctgaaggag 840
atcatgaagg tgacngggga cgcctccggc tgagtttgtg cagcggctgc agagcgatga 900
ggccaagaac tacatgaagg gcctccccga attggagaag aaggattttg cctctatcct 960
gaccaatgca agccctctgg ctgtgaacct cctggagaag atgctggtgc tggacgcgga 1020
gcagcgggtg acggcaggcg aggcgctggc ccatccctac ttcgagtccc tgcacgacac 1080
ggaagatgag ccccagggtcc agaagtatga tgactccttt gacgacgttg accgcacact 1140
ggatgaatgg aagcgtgtta cttacaaaga ggtgctcagc ttcaagcctn cccggcaggc 1200
tggggggccag ggtctncaan gagacgcctn tgtgaagatc tcttgggctt cgggggtggg 1260
cagtgaggac caccttcacc ttccacctga gaggggactc tcgntggcac cttgaccttg 1320
gctggggctt gcattccaag gcatccattc agacagacgc ccgggttcct ggacctnct 1380
tcccacgggc atgcctntgt cttgggcgcc catatggang agcctgact ttctggacaa 1440
anctctggnc ca                                     1452

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<210> 36
<211> 2355
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> (1)..(2355)
<223> any n = a,c,g,t any unknown or other

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<400> 36
gaattccgcc agccccgcca gtccccgcgc agtccccgcg cagtcccagc gccaccgggc 60
agcagcggcg ccgtgctcgc tccagggcgc aaccatgtcg ccatttcttc ggattggctt 120
gtccaacttt gactgcgggt cctgccagtc ttgtcagggc gaggctgtta acccttactg 180
tgctgtgctc gtcaaagagt atgtcgaatc agagaacggg cagatgtata tccagaaaaa 240
gcctaccatg taccaccctt gggacagcac ttttgatgcc catatcaaca agggaagagt 300
catgcagatc atttgtaaaag gcaaaaacgt ggacctcatc tctgaaacca ccgtggagct 360
ctactcgctg gctgagaggt gcaggaagaa caacgggaag acagaaatat ggtagagct 420
gaaacctcaa ggccgaatgc taatgaatgc aagatacttt ctggaaatga gtgacacaaa 480
ggacatgaat gaatttgaga cggaaggctt ctttgctttg catcagcgcc ggggtgccat 540
caagcaggca aaggtccacc acgtcaagtg ccacgagttc actgccacct tcttcccaca 600
gccacatatt tgctctgtct gccacgagtt tgtctggggc ctgaacaaac agggctacca 660
gtgccgacaa tgcaatgcag caattcacia gaagtgtatt gataaagtta tagcaaagtg 720
cacaggatca gctatcaata gccgagaaac catgttccac aaggagagat tcaaaattga 780
catgccacac agatttaaag tctacaatta caagagcccg accttctgtg aacctgtgg 840
gacctgctg tggggactgg cacggcaagg actcaagtgt gatgcatgtg gcatgaatgt 900
gcatcataga tgccagacaa aggtggccaa cctttgtggc ataaaccaga agctaattgc 960
tgaagcgtg gccatgattg agagcactca acaggctcgc tgcttaagag atactgaaca 1020
gatcttcaga gaaggtccgg ttgaaattgg tctcccatgc tccatcaaaa atgaagcaag 1080
gccgccatgt ttaccgacac cgggaaaaag agagcctcag ggcatttcct gggagtctcc 1140

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gttgatgag gtggataaaa tgtgccatct tccagaacct gaactgaaca aagaaagacc 1200
atctctgcag attaaactaa aaattgagga ttttatcttg cacaaaatgt tggggaaagg 1260
aagttttggc aaggtcttcc tggcagaatt caagaaaacc aatcaatttt tcgcaataaa 1320
ggccttaaag aaagatgtgg tcttgatgga cgatgatgtt gagtgcacga tggtagagaa 1380
gagagttctt tccttggcct gggagcatcc gtttctgacg cacatgtttt gtacattcca 1440
gaccaaggaa aacctctttt ttgtgatgga gtacctcaac ggaggggact taatgtacca 1500
catccaaagc tgccacaagt tcgacctttc cagagcgacg ttttatgctg ctgaaatcat 1560
tcttggtctg cagttccttc attccaaagg aatagtctac agggacctga agctagataa 1620
catcctgtta gacaaagatg gacatatcaa gatcgcggat tttggaatgt gcaaggagaa 1680
catgttagga gatgccaaga cgaatacctt ctgtgggaca cctgactaca tcgccccaga 1740
gatcttgctg ggtcagaaat acaaccactc tgtggactgg tggctcttcg gggttctcct 1800
ttatgaaatg ctgattggtc agtcgccttt ccacgggcag gatgaggagg agctcttcca 1860
ctccatccgc atggacaatc ccttttacct acggtggctg gagaaggaag caaaggacct 1920
tctggtgaag gtaagaagcg aagccaagag cgtcttcata agacgagcat taggtcttct 1980
ggtcagtttt ctgttcctct tagtttccaa cttgcatgtg gcaaacaatg attattattg 2040
aactgggttt aaatgggatg tgcaccgtct gtgttttaat agaggcacca atattatgag 2100
cattaaatgt caaaatgagt gtaagagaaa ccctcatgtg catcagttat aacataacgg 2160
ccccaggaac cagttccatg gaccttgaat acgctcacct ggagatgtag ttggttcatt 2220
aaacaagcac agtgtgtggc ttaaaaatca atcttctagc tacttgggag gttgaggcag 2280
gaggattgaa gttggaagtg tgaggtcagc ctgggcaatg tatcgagacc cctgtctcca 2340
aaacaataaa gggga                                     2355

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<210> 37
 <211> 497
 <212> PRT
 <213> Homo sapiens

<400> 37
 Met Val Arg Ser Gly Asn Lys Ala Ala Val Val Leu Cys Met Asp Val
 1 5 10 15
 Gly Phe Thr Met Ser Asn Ser Ile Pro Gly Ile Glu Ser Pro Phe Glu
 20 25 30
 Gln Ala Lys Lys Val Ile Thr Met Phe Val Gln Arg Gln Val Phe Ala
 35 40 45
 Glu Asn Lys Asp Glu Ile Ala Leu Val Leu Phe Gly Thr Asp Gly Thr
 50 55 60
 Asp Asn Pro Leu Ser Gly Gly Asp Gln Tyr Gln Asn Ile Thr Val His
 65 70 75 80
 Arg His Leu Met Leu Pro Asp Phe Asp Leu Leu Glu Asp Ile Glu Ser
 85 90 95
 Lys Ile Gln Pro Gly Ser Gln Gln Ala Asp Phe Leu Asp Ala Leu Ile
 100 105 110
 Val Ser Met Asp Val Ile Gln His Glu Thr Ile Gly Lys Lys Phe Glu
 115 120 125
 Lys Arg His Ile Glu Ile Phe Thr Asp Leu Ser Ser Arg Phe Ser Lys
 130 135 140
 Ser Gln Leu Asp Ile Ile Ile His Ser Leu Lys Lys Cys Asp Ile Ser

145		150		155		160
Leu Gln Phe Phe	Leu Pro Phe Ser	Leu Gly Lys Glu Asp	Gly Ser Gly			
	165	170	175			
Asp Arg Gly Asp	Gly Pro Phe Arg	Leu Gly Gly His	Gly Pro Ser Phe			
	180	185	190			
Pro Leu Lys Gly	Ile Thr Glu Gln	Gln Lys Glu Gly	Leu Glu Ile Val			
	195	200	205			
Lys Met Val Met	Ile Ser Leu Glu	Gly Glu Asp Gly	Leu Asp Glu Ile			
	210	215	220			
Tyr Ser Phe Ser	Glu Ser Leu Arg	Lys Leu Cys Val	Phe Lys Lys Ile			
	225	230	235			240
Glu Arg His Ser	Ile His Trp Pro	Cys Arg Leu Thr	Ile Gly Ser Asn			
	245	250	255			
Leu Ser Ile Arg	Ile Ala Ala Tyr	Lys Ser Ile Leu	Gln Glu Arg Val			
	260	265	270			
Lys Lys Thr Trp	Thr Val Val Asp	Ala Lys Thr Leu	Lys Lys Glu Asp			
	275	280	285			
Ile Gln Lys Glu	Thr Val Tyr Cys	Leu Asn Asp Asp	Asp Asp Glu Thr	Glu		
	290	295	300			
Val Leu Lys Glu	Asp Ile Ile Gln	Gly Phe Arg Tyr	Gly Ser Asp Ile			
	305	310	315			320
Val Pro Phe Ser	Lys Val Asp Glu	Glu Gln Met Lys	Tyr Lys Ser Glu			
	325	330	335			
Gly Lys Cys Phe	Ser Val Leu Gly	Phe Cys Lys Ser	Ser Ser Gln Val	Gln		
	340	345	350			
Arg Arg Phe Phe	Met Gly Asn Gln	Val Leu Lys Val	Phe Ala Ala Arg			
	355	360	365			
Asp Asp Glu Ala	Ala Ala Val Ala	Leu Ser Ser Leu	Ile His Ala Leu			
	370	375	380			
Asp Asp Leu Asp	Met Val Ala Ile	Val Arg Tyr Ala	Tyr Asp Lys Arg			
	385	390	395			400
Ala Asn Pro Gln	Val Gly Val Ala	Phe Pro His Ile	Lys His Asn Tyr			
	405	410	415			
Glu Cys Leu Val	Tyr Val Gln Leu	Pro Phe Met Glu	Asp Leu Arg Gln			
	420	425	430			
Tyr Met Phe Ser	Ser Leu Lys Asn	Ser Lys Lys Tyr	Ala Pro Thr Glu			
	435	440	445			
Ala Gln Leu Asn	Ala Val Asp Ala	Leu Ile Asp Ser	Met Ser Leu Ala			

450 455 460
 Lys Lys Asp Glu Lys Thr Asp Thr Leu Glu Asp Leu Phe Pro Thr Thr
 465 470 475 480
 Lys Ile Pro Asn Pro Arg Phe Gln Arg Leu Phe Gln Val Arg Glu Glu
 485 490 495

Gly

<210> 38
 <211> 521
 <212> PRT
 <213> Homo sapiens

<400> 38
 Met Val Arg Ser Gly Asn Lys Ala Ala Val Val Leu Cys Met Asp Val
 1 5 10 15
 Gly Phe Thr Met Ser Asn Ser Ile Pro Gly Ile Glu Ser Pro Phe Glu
 20 25 30
 Gln Ala Lys Lys Val Ile Thr Met Phe Val Gln Arg Gln Val Phe Ala
 35 40 45
 Glu Asn Lys Asp Glu Ile Ala Leu Val Leu Phe Gly Thr Asp Gly Thr
 50 55 60
 Asp Asn Pro Leu Ser Gly Gly Asp Gln Tyr Gln Asn Ile Thr Val His
 65 70 75 80
 Arg His Leu Met Leu Pro Asp Phe Asp Leu Leu Glu Asp Ile Glu Ser
 85 90 95
 Lys Ile Gln Pro Gly Ser Gln Gln Ala Asp Phe Leu Asp Ala Leu Ile
 100 105 110
 Val Ser Met Asp Val Ile Gln His Glu Thr Ile Gly Lys Lys Phe Glu
 115 120 125
 Lys Arg His Ile Glu Ile Phe Thr Asp Leu Ser Ser Arg Phe Ser Lys
 130 135 140
 Ser Gln Leu Asp Ile Ile Ile His Ser Leu Lys Lys Cys Asp Ile Ser
 145 150 155 160
 Leu Gln Phe Phe Leu Pro Phe Ser Leu Gly Lys Glu Asp Gly Ser Gly
 165 170 175
 Asp Arg Gly Asp Gly Pro Phe Arg Leu Gly Gly His Gly Pro Ser Phe
 180 185 190
 Pro Leu Lys Gly Ile Thr Glu Gln Gln Lys Glu Gly Leu Glu Ile Val
 195 200 205

Lys Met Val Met Ile Ser Leu Glu Gly Glu Asp Gly Leu Asp Glu Ile
 210 215 220
 Tyr Ser Phe Ser Glu Ser Leu Arg Lys Leu Cys Val Phe Lys Lys Ile
 225 230 235 240
 Glu Arg His Ser Ile His Trp Pro Cys Arg Leu Thr Ile Gly Ser Asn
 245 250 255
 Leu Ser Ile Arg Ile Ala Ala Tyr Lys Ser Ile Leu Gln Glu Arg Val
 260 265 270
 Lys Lys Thr Trp Thr Val Val Asp Ala Lys Thr Leu Lys Lys Glu Asp
 275 280 285
 Ile Gln Lys Glu Thr Val Tyr Cys Leu Asn Asp Asp Asp Glu Thr Glu
 290 295 300
 Leu Asn Pro Pro Ala Glu Val Thr Thr Lys Ser Gln Ile Pro Leu Ser
 305 310 315 320
 Lys Ile Lys Thr Leu Phe Pro Leu Ile Glu Ala Lys Lys Lys Asp Gln
 325 330 335
 Val Thr Ala Gln Glu Ile Phe Gln Asp Asn His Glu Asp Gly Pro Thr
 340 345 350
 Ala Lys Lys Leu Lys Thr Glu Gln Gly Gly Ala His Phe Ser Val Ser
 355 360 365
 Ser Leu Ala Glu Gly Ser Val Thr Ser Val Gly Ser Val Asn Pro Ala
 370 375 380
 Glu Asn Phe Arg Val Leu Val Lys Gln Lys Lys Ala Ser Phe Glu Glu
 385 390 395 400
 Ala Ser Asn Gln Leu Ile Asn His Ile Glu Gln Phe Leu Asp Thr Asn
 405 410 415
 Glu Thr Pro Tyr Phe Met Lys Ser Ile Asp Cys Ile Arg Ala Phe Arg
 420 425 430
 Glu Glu Ala Ile Lys Phe Ser Glu Glu Gln Arg Phe Asn Asn Phe Leu
 435 440 445
 Lys Ala Leu Gln Glu Lys Val Glu Ile Lys Gln Leu Asn His Phe Trp
 450 455 460
 Glu Ile Val Val Gln Asp Gly Ile Thr Leu Ile Thr Lys Glu Glu Ala
 465 470 475 480
 Ser Gly Ser Ser Val Thr Ala Glu Glu Ala Lys Lys Phe Leu Ala Pro
 485 490 495
 Lys Asp Lys Pro Ser Gly Asp Thr Ala Ala Val Phe Glu Glu Gly Gly
 500 505 510

Asp Val Asp Asp Leu Leu Asp Met Ile
 515 520

<210> 39
 <211> 437
 <212> PRT
 <213> Homo sapiens

<400> 39
 Met Gly Cys Gly Cys Ser Ser His Pro Glu Asp Asp Trp Met Glu Asn
 1 5 10 15
 Ile Asp Val Cys Glu Asn Cys His Tyr Pro Ile Val Pro Leu Asp Gly
 20 25 30
 Lys Gly Thr Leu Leu Ile Arg Asn Gly Ser Glu Val Arg Asp Pro Leu
 35 40 45
 Val Thr Tyr Glu Gly Ser Asn Pro Pro Ala Ser Pro Leu Gln Asp Asn
 50 55 60
 Leu Val Ile Ala Leu His Ser Tyr Glu Pro Ser His Asp Gly Asp Leu
 65 70 75 80
 Gly Phe Glu Lys Gly Glu Gln Leu Arg Ile Leu Glu Gln Ser Gly Glu
 85 90 95
 Trp Trp Lys Ala Gln Ser Leu Thr Thr Gly Gln Glu Gly Phe Ile Pro
 100 105 110
 Phe Asn Phe Val Ala Lys Ala Asn Ser Leu Glu Pro Glu Pro Trp Phe
 115 120 125
 Phe Lys Asn Leu Ser Arg Lys Asp Ala Glu Arg Gln Leu Leu Ala Pro
 130 135 140
 Gly Asn Thr His Gly Ser Phe Leu Ile Arg Glu Ser Glu Ser Thr Ala
 145 150 155 160
 Gly Ser Phe Ser Leu Ser Val Arg Asp Phe Asp Gln Asn Gln Gly Glu
 165 170 175
 Val Val Lys His Tyr Lys Ile Arg Asn Leu Asp Asn Gly Gly Phe Tyr
 180 185 190
 Ile Ser Pro Arg Ile Thr Phe Pro Gly Leu His Glu Leu Val Arg His
 195 200 205
 Tyr Thr Asn Ala Ser Asp Gly Leu Cys Thr Arg Leu Ser Arg Pro Cys
 210 215 220
 Gln Thr Gln Lys Pro Gln Lys Pro Trp Trp Glu Asp Glu Trp Glu Val
 225 230 235 240

50	55	60
Pro Arg Gln Gln Gly Leu Lys Asp Lys Ala Cys Gly Ser Leu Ala Val		
65	70	75 80
Gly Phe His Leu Ser Pro Thr Tyr Phe Leu Pro Gly Leu Ala Phe Leu		
	85	90 95
Val Pro His Pro Val Thr Pro Gly Phe Leu Pro Ile Pro Ala Arg Phe		
	100	105 110
Ser Leu Thr Pro Leu Val Phe Thr Asp Asn Leu Val Ile Ala Leu His		
	115	120 125
Ser Tyr Glu Pro Ser His Asp Gly Asp Leu Gly Phe Glu Lys Gly Glu		
	130	135 140
Gln Leu Arg Ile Leu Glu Gln Ser Gly Glu Trp Trp Lys Ala Gln Ser		
	145	150 155 160
Leu Thr Thr Gly Gln Glu Gly Phe Ile Pro Phe Asn Phe Val Ala Lys		
	165	170 175
Ala Asn Ser Leu Glu Pro Glu Pro Trp Phe Phe Lys Asn Leu Ser Arg		
	180	185 190
Lys Asp Ala Glu Arg Gln Leu Leu Ala Pro Gly Asn Thr His Gly Ser		
	195	200 205
Phe Leu Ile Arg Glu Ser Glu Ser Thr Ala Gly Ser Phe Ser Leu Ser		
	210	215 220
Val Arg Asp Phe Asp Gln Asn Gln Gly Glu Val Val Lys His Tyr Lys		
	225	230 235 240
Ile Arg Asn Leu Asp Asn Gly Gly Phe Tyr Ile Ser Pro Arg Ile Thr		
	245	250 255
Phe Pro Gly Leu His Glu Leu Val Arg His Tyr Thr Asn Ala Ser Asp		
	260	265 270
Gly Leu Cys Thr Arg Leu Ser Arg Pro Cys Gln Thr Gln Lys Pro Gln		
	275	280 285
Lys Pro Trp Trp Glu Asp Glu Trp Glu Val Pro Arg Glu Thr Leu Lys		
	290	295 300
Leu Val Glu Arg Leu Gly Ala Gly Gln Phe Gly Glu Val Trp Met Gly		
	305	310 315 320
Tyr Tyr Asn Gly His Thr Lys Val Ala Val Lys Ser Leu Lys Gln Gly		
	325	330 335
Ser Met Ser Pro Asp Ala Phe Leu Ala Glu Ala Asn Leu Met Lys Gln		
	340	345 350
Leu Gln His Gln Arg Leu Val Arg Leu Tyr Ala Val Val Thr Gln Glu		

355	360	365
Pro Ile Tyr Ile Ile Thr Glu Tyr Met Glu Asn Gly Ser Leu Val Asp 370 375 380		
Phe Leu Lys Thr Pro Ser Gly Ile Lys Leu Thr Ile Asn Lys Leu Leu 385 390 395 400		
Asp Met Ala Ala Gln Ile Ala Glu Gly Met Ala Phe Ile Glu Glu Arg 405 410 415		
Asn Tyr Ile His Arg Asp Leu Arg Ala Ala Asn Ile Leu Val Ser Asp 420 425 430		
Thr Leu Ser Cys Lys Ile Ala Asp Phe Gly Leu Ala Arg Leu Ile Glu 435 440 445		
Asp Asn Glu Tyr Thr Ala Arg Glu Gly Ala Lys Phe Pro Ile Lys Trp 450 455 460		
Thr Ala Pro Glu Ala Ile Asn Tyr Gly Thr Phe Thr Ile Lys Ser Asp 465 470 475 480		
Val Trp Ser Phe Gly Ile Leu Leu Thr Glu Ile Val Thr His Gly Arg 485 490 495		
Ile Pro Tyr Pro Gly Met Thr Asn Pro Glu Val Ile Gln Asn Leu Glu 500 505 510		
Arg Gly Tyr Arg Met Val Arg Pro Asp Asn Cys Pro Glu Glu Leu Tyr 515 520 525		
Gln Leu Met Arg Leu Cys Trp Lys Glu Arg Pro Glu Asp Arg Pro Thr 530 535 540		
Phe Asp Tyr Leu Arg Ser Val Leu Glu Asp Phe Phe Thr Ala Thr Glu 545 550 555 560		
Gly Gln Tyr Gln Pro Gln Pro 565		

<210> 41
 <211> 192
 <212> PRT
 <213> Homo sapiens

<400> 41
 Met Arg Ile Ala Val Ile Cys Phe Cys Leu Leu Gly Ile Thr Cys Ala
 1 5 10 15
 Ile Pro Val Lys Gln Ala Asp Ser Gly Ser Ser Glu Glu Lys Gln Leu
 20 25 30
 Tyr Asn Lys Tyr Pro Asp Ala Val Ala Thr Trp Leu Asn Pro Asp Pro
 35 40 45

Ser Gln Lys Gln Asn Leu Leu Ala Pro Gln Asn Ala Val Ser Ser Glu
 50 55 60
 Glu Thr Asn Asp Phe Lys Gln Glu Thr Leu Pro Ser Lys Ser Asn Glu
 65 70 75 80
 Ser His Asp His Met Asp Asp Met Asp Asp Glu Asp Asp Asp Asp His
 85 90 95
 Val Asp Ser Gln Asp Ser Ile Asp Ser Asn Asp Ser Asp Asp Val Asp
 100 105 110
 Asp Thr Asp Asp Ser His Gln Ser Asp Glu Ser His His Ser Asp Glu
 115 120 125
 Ser Asp Glu Leu Val Thr Asp Phe Pro Thr Asp Leu Pro Ala Thr Glu
 130 135 140
 Val Phe Thr Pro Val Val Pro Thr Val Asp Thr Tyr Asp Gly Arg Gly
 145 150 155 160
 Asp Ser Val Val Tyr Gly Leu Arg Ser Lys Ser Lys Lys Phe Arg Arg
 165 170 175
 Pro Asp Ile Gln Val Asn Pro Leu Thr Asp Thr Pro Asp Gly Ser Asp
 180 185 190

<210> 42
 <211> 109
 <212> PRT
 <213> Homo sapiens

<400> 42
 Met Glu Leu Gly Leu Pro Gln Val Pro Pro Ala Val Asp Ala Glu Leu
 1 5 10 15
 Leu Cys Arg Phe Val Asp Arg Gly Leu Pro Tyr Pro Asp Val Ser Ser
 20 25 30
 Ala Asn Thr Pro Pro Ala Val Gly Leu Ser Pro Pro Thr Pro Tyr Phe
 35 40 45
 Glu Pro Cys Ala Leu Pro Ser Pro His Arg His Gln Leu Ala Glu Ala
 50 55 60
 Ile Pro Cys Thr Leu Ala Val Ser Asn Pro His Thr Asp Ala Trp Lys
 65 70 75 80
 Ser His Gly Leu Val Glu Val Ala Ser Tyr Cys Glu Glu Ser Arg Gly
 85 90 95

Asn Asn Gln Trp Val Pro Tyr Ile Ser Leu Gln Glu Arg
100 105

<210> 43
<211> 331
<212> PRT
<213> Homo sapiens

<400> 43
Met Arg Ala Arg Pro Gln Val Cys Glu Ala Leu Leu Phe Ala Leu Ala
1 5 10 15
Leu Gln Thr Gly Val Cys Tyr Gly Ile Lys Trp Leu Ala Leu Ser Lys
20 25 30
Thr Pro Ser Ala Leu Ala Leu Asn Gln Thr Gln His Cys Lys Gln Leu
35 40 45
Glu Gly Leu Val Ser Ala Gln Val Gln Leu Cys Arg Ser Asn Leu Glu
50 55 60
Leu Met His Thr Val Val His Ala Ala Arg Glu Val Met Lys Ala Cys
65 70 75 80
Arg Arg Ala Phe Ala Asp Met Arg Trp Asn Cys Ser Ser Ile Glu Leu
85 90 95
Ala Pro Asn Tyr Leu Leu Asp Leu Glu Arg Gly Thr Arg Glu Ser Ala
100 105 110
Phe Val Tyr Ala Leu Ser Ala Ala Ala Ile Ser His Ala Ile Ala Arg
115 120 125
Ala Cys Thr Ser Gly Asp Leu Pro Gly Cys Ser Cys Gly Pro Val Pro
130 135 140
Gly Glu Pro Pro Gly Pro Gly Asn Arg Trp Gly Arg Cys Ala Asp Asn
145 150 155 160
Leu Ser Tyr Gly Leu Leu Met Gly Ala Lys Phe Ser Asp Ala Pro Met
165 170 175
Lys Val Lys Lys Thr Gly Ser Gln Ala Asn Lys Leu Met Arg Leu His
180 185 190
Asn Ser Glu Val Gly Arg Gln Ala Leu Arg Ala Ser Leu Glu Met Lys
195 200 205
Cys Lys Cys His Gly Val Ser Gly Ser Cys Ser Ile Arg Thr Cys Trp
210 215 220
Lys Gly Leu Gln Glu Leu Gln Asp Val Ala Ala Asp Leu Lys Thr Arg
225 230 235 240
Tyr Leu Ser Ala Thr Lys Val Val His Arg Pro Met Gly Thr Arg Lys

Thr Gln Asp Arg Gln Cys Asn Lys Thr Ser Asn Gly Ser Asp Ser Cys
 180 185 190
 Asp Leu Met Cys Cys Gly Arg Gly Tyr Asn Pro Tyr Thr Asp Arg Val
 195 200 205
 Val Glu Arg Cys His Cys Lys Tyr His Trp Cys Cys Tyr Val Thr Cys
 210 215 220
 Arg Arg Cys Glu Arg Thr Val Glu Arg Tyr Val Cys Lys
 225 230 235

<210> 45
 <211> 615
 <212> PRT
 <213> Homo sapiens

<400> 45
 Met Ser Pro Phe Leu Arg Ile Gly Leu Ser Asn Phe Asp Cys Gly Ser
 1 5 10 15
 Cys Gln Ser Cys Gln Gly Glu Ala Val Asn Pro Tyr Cys Ala Val Leu
 20 25 30
 Val Lys Glu Tyr Val Glu Ser Glu Asn Gly Gln Met Tyr Ile Gln Lys
 35 40 45
 Lys Pro Thr Met Tyr Pro Pro Trp Asp Ser Thr Phe Asp Ala His Ile
 50 55 60
 Asn Lys Gly Arg Val Met Gln Ile Ile Val Lys Gly Lys Asn Val Asp
 65 70 75 80
 Leu Ile Ser Glu Thr Thr Val Glu Leu Tyr Ser Leu Ala Glu Arg Cys
 85 90 95
 Arg Lys Asn Asn Gly Lys Thr Glu Ile Trp Leu Glu Leu Lys Pro Gln
 100 105 110
 Gly Arg Met Leu Met Asn Ala Arg Tyr Phe Leu Glu Met Ser Asp Thr
 115 120 125
 Lys Asp Met Asn Glu Phe Glu Thr Glu Gly Phe Phe Ala Leu His Gln
 130 135 140
 Arg Arg Gly Ala Ile Lys Gln Ala Lys Val His His Val Lys Cys His
 145 150 155 160
 Glu Phe Thr Ala Thr Phe Phe Pro Gln Pro Thr Phe Cys Ser Val Cys
 165 170 175
 His Glu Phe Val Trp Gly Leu Asn Lys Gln Gly Tyr Gln Cys Arg Gln
 180 185 190

Cys	Asn	Ala	Ala	Ile	His	Lys	Lys	Cys	Ile	Asp	Lys	Val	Ile	Ala	Lys	195	200	205
Cys	Thr	Gly	Ser	Ala	Ile	Asn	Ser	Arg	Glu	Thr	Met	Phe	His	Lys	Glu	210	215	220
Arg	Phe	Lys	Ile	Asp	Met	Pro	His	Arg	Phe	Lys	Val	Tyr	Asn	Tyr	Lys	225	230	235
Ser	Pro	Thr	Phe	Cys	Glu	His	Cys	Gly	Thr	Leu	Leu	Trp	Gly	Leu	Ala	245	250	255
Arg	Gln	Gly	Leu	Lys	Cys	Asp	Ala	Cys	Gly	Met	Asn	Val	His	His	Arg	260	265	270
Cys	Gln	Thr	Lys	Val	Ala	Asn	Leu	Cys	Gly	Ile	Asn	Gln	Lys	Leu	Met	275	280	285
Ala	Glu	Ala	Leu	Ala	Met	Ile	Glu	Ser	Thr	Gln	Gln	Ala	Arg	Cys	Leu	290	295	300
Arg	Asp	Thr	Glu	Gln	Ile	Phe	Arg	Glu	Gly	Pro	Val	Glu	Ile	Gly	Leu	305	310	315
Pro	Cys	Ser	Ile	Lys	Asn	Glu	Ala	Arg	Pro	Pro	Cys	Leu	Pro	Thr	Pro	325	330	335
Gly	Lys	Arg	Glu	Pro	Gln	Gly	Ile	Ser	Trp	Glu	Ser	Pro	Leu	Asp	Glu	340	345	350
Val	Asp	Lys	Met	Cys	His	Leu	Pro	Glu	Pro	Glu	Leu	Asn	Lys	Glu	Arg	355	360	365
Pro	Ser	Leu	Gln	Ile	Lys	Leu	Lys	Ile	Glu	Asp	Phe	Ile	Leu	His	Lys	370	375	380
Met	Leu	Gly	Lys	Gly	Ser	Phe	Gly	Lys	Val	Phe	Leu	Ala	Glu	Phe	Lys	385	390	395
Lys	Thr	Asn	Gln	Phe	Phe	Ala	Ile	Lys	Ala	Leu	Lys	Lys	Asp	Val	Val	405	410	415
Leu	Met	Asp	Asp	Asp	Val	Glu	Cys	Thr	Met	Val	Glu	Lys	Arg	Val	Leu	420	425	430
Ser	Leu	Ala	Trp	Glu	His	Pro	Phe	Leu	Thr	His	Met	Phe	Cys	Thr	Phe	435	440	445
Gln	Thr	Lys	Glu	Asn	Leu	Phe	Phe	Val	Met	Glu	Tyr	Leu	Asn	Gly	Gly	450	455	460
Asp	Leu	Met	Tyr	His	Ile	Gln	Ser	Cys	His	Lys	Phe	Asp	Leu	Ser	Arg	465	470	475
Ala	Thr	Phe	Tyr	Ala	Ala	Glu	Ile	Ile	Leu	Gly	Leu	Gln	Phe	Leu	His	485	490	495

Ser Lys Gly Ile Val Tyr Arg Asp Leu Lys Leu Asp Asn Ile Leu Leu
 500 505 510
 Asp Lys Asp Gly His Ile Lys Ile Ala Asp Phe Gly Met Cys Lys Glu
 515 520 525
 Asn Met Leu Gly Asp Ala Lys Thr Asn Thr Phe Cys Gly Thr Pro Asp
 530 535 540
 Tyr Ile Ala Pro Glu Ile Leu Leu Gly Gln Lys Tyr Asn His Ser Val
 545 550 555 560
 Asp Trp Trp Ser Phe Gly Val Leu Leu Tyr Glu Met Leu Ile Gly Gln
 565 570 575
 Ser Pro Phe His Gly Gln Asp Glu Glu Leu Phe His Ser Ile Arg
 580 585 590
 Met Asp Asn Pro Phe Tyr Pro Arg Trp Leu Glu Lys Glu Ala Lys Asp
 595 600 605
 Leu Leu Val Lys Val Arg Ser
 610 615

<210> 46
 <211> 292
 <212> PRT
 <213> Homo sapiens

<400> 46
 Met Pro Ile Thr Arg Met Arg Met Arg Pro Trp Leu Glu Met Gln Ile
 1 5 10 15
 Asn Ser Asn Gln Ile Pro Gly Leu Ile Trp Ile Asn Lys Glu Glu Met
 20 25 30
 Ile Phe Gln Ile Pro Trp Lys His Ala Ala Lys His Gly Trp Asp Ile
 35 40 45
 Asn Lys Asp Ala Cys Leu Phe Arg Ser Trp Ala Ile His Thr Gly Arg
 50 55 60
 Tyr Lys Ala Gly Glu Lys Glu Pro Asp Pro Lys Thr Trp Lys Ala Asn
 65 70 75 80
 Phe Arg Cys Ala Met Asn Ser Leu Pro Asp Ile Glu Glu Val Lys Asp
 85 90 95
 Gln Ser Arg Asn Lys Gly Ser Ser Ala Val Arg Val Tyr Arg Met Leu
 100 105 110
 Pro Pro Leu Thr Lys Asn Gln Arg Lys Glu Arg Lys Ser Lys Ser Ser
 115 120 125
 Arg Asp Ala Lys Ser Lys Ala Lys Arg Lys Ser Cys Gly Asp Ser Ser

130	135	140
Pro Asp Thr Phe Ser Asp Gly Leu Ser Ser Ser Thr Leu Pro Asp Asp 145 150 155 160		
His Ser Ser Tyr Thr Val Pro Gly Tyr Met Gln Asp Leu Glu Val Glu 165 170 175		
Gln Ala Leu Thr Pro Ala Leu Ser Pro Cys Ala Val Ser Ser Thr Leu 180 185 190		
Pro Asp Trp His Ile Pro Val Glu Val Val Pro Asp Ser Thr Ser Asp 195 200 205		
Leu Tyr Asn Phe Gln Val Ser Pro Met Pro Ser Thr Ser Glu Ala Thr 210 215 220		
Thr Asp Glu Asp Glu Glu Gly Lys Leu Pro Glu Asp Ile Met Lys Leu 225 230 235 240		
Leu Glu Gln Ser Glu Trp Gln Pro Thr Asn Val Asp Gly Lys Gly Tyr 245 250 255		
Leu Leu Asn Glu Pro Gly Val Gln Pro Thr Ser Val Tyr Gly Asp Phe 260 265 270		
Ser Cys Lys Glu Glu Pro Glu Ile Asp Ser Pro Gly Gly Lys Lys Ala 275 280 285		
Pro Gly Ser Leu 290		

<210> 47
 <211> 702
 <212> PRT
 <213> Homo sapiens

<400> 47
 Met Trp Ser Trp Lys Cys Leu Leu Phe Trp Ala Val Leu Val Thr Ala
 1 5 10 15
 Thr Leu Cys Thr Ala Arg Pro Ser Pro Thr Leu Pro Glu Gln Ala Gln
 20 25 30
 Pro Trp Gly Ala Pro Val Glu Val Glu Ser Phe Leu Val His Pro Gly
 35 40 45
 Asp Leu Leu Gln Leu Arg Cys Arg Leu Arg Asp Asp Val Gln Ser Ile
 50 55 60
 Asn Trp Leu Arg Asp Gly Val Gln Leu Ala Glu Ser Asn Arg Thr Arg
 65 70 75 80
 Ile Thr Gly Glu Glu Val Glu Val Gln Asp Ser Val Pro Ala Asp Ser
 85 90 95

Gly	Leu	Tyr	Ala	Cys	Val	Thr	Ser	Ser	Pro	Ser	Gly	Ser	Asp	Thr	Thr	100	105	110
Tyr	Phe	Ser	Val	Asn	Val	Ser	Asp	Ala	Leu	Pro	Ser	Ser	Glu	Asp	Asp	115	120	125
Asp	Asp	Asp	Asp	Asp	Ser	Ser	Ser	Glu	Glu	Lys	Glu	Thr	Asp	Asn	Thr	130	135	140
Lys	Pro	Asn	Arg	Met	Pro	Val	Ala	Pro	Tyr	Trp	Thr	Ser	Pro	Glu	Lys	145	150	155
Met	Glu	Lys	Lys	Leu	His	Ala	Val	Pro	Ala	Ala	Lys	Thr	Val	Lys	Phe	165	170	175
Lys	Cys	Pro	Ser	Ser	Gly	Thr	Pro	Asn	Pro	Thr	Leu	Arg	Trp	Leu	Lys	180	185	190
Asn	Gly	Lys	Glu	Phe	Lys	Pro	Asp	His	Arg	Ile	Gly	Gly	Tyr	Lys	Val	195	200	205
Arg	Tyr	Ala	Thr	Trp	Ser	Ile	Ile	Met	Asp	Ser	Val	Val	Pro	Ser	Asp	210	215	220
Lys	Gly	Asn	Tyr	Thr	Cys	Ile	Val	Glu	Asn	Glu	Tyr	Gly	Ser	Ile	Asn	225	230	235
His	Thr	Tyr	Gln	Leu	Asp	Val	Val	Glu	Arg	Ser	Pro	His	Arg	Pro	Ile	245	250	255
Leu	Gln	Ala	Gly	Leu	Pro	Ala	Asn	Lys	Thr	Val	Ala	Leu	Gly	Ser	Asn	260	265	270
Val	Glu	Phe	Met	Cys	Lys	Val	Tyr	Ser	Asp	Pro	Gln	Pro	His	Ile	Gln	275	280	285
Trp	Leu	Lys	His	Ile	Glu	Val	Asn	Gly	Ser	Lys	Ile	Gly	Pro	Asp	Asn	290	295	300
Leu	Pro	Tyr	Val	Gln	Ile	Leu	Lys	Thr	Ala	Gly	Val	Asn	Thr	Thr	Asp	305	310	315
Lys	Glu	Met	Glu	Val	Leu	His	Leu	Arg	Asn	Val	Ser	Phe	Glu	Asp	Ala	325	330	335
Gly	Glu	Tyr	Thr	Cys	Leu	Ala	Gly	Asn	Ser	Ile	Gly	Leu	Ser	His	His	340	345	350
Ser	Ala	Trp	Leu	Thr	Val	Leu	Glu	Ala	Leu	Glu	Glu	Arg	Pro	Ala	Val	355	360	365
Met	Thr	Ser	Pro	Leu	Tyr	Leu	Glu	Ile	Ile	Ile	Tyr	Cys	Thr	Gly	Ala	370	375	380
Phe	Leu	Ile	Ser	Cys	Met	Val	Gly	Ser	Val	Ile	Val	Tyr	Lys	Met	Lys	385	390	395

Ser	Gly	Thr	Lys	Lys	Ser	Asp	Phe	His	Ser	Gln	Met	Ala	Val	His	Lys	
				405					410					415		
Leu	Ala	Lys	Ser	Ile	Pro	Leu	Arg	Arg	Gln	Val	Thr	Val	Ser	Ala	Asp	
			420					425					430			
Ser	Ser	Ala	Ser	Met	Asn	Ser	Gly	Val	Leu	Leu	Val	Arg	Pro	Ser	Arg	
		435					440					445				
Leu	Ser	Ser	Ser	Gly	Thr	Pro	Met	Leu	Ala	Gly	Val	Ser	Glu	Tyr	Glu	
	450					455					460					
Leu	Pro	Glu	Asp	Pro	Arg	Trp	Glu	Leu	Pro	Arg	Asp	Arg	Leu	Val	Leu	
465					470					475					480	
Gly	Lys	Pro	Leu	Gly	Glu	Gly	Cys	Phe	Gly	Gln	Val	Val	Leu	Ala	Glu	
				485					490					495		
Ala	Ile	Gly	Leu	Asp	Lys	Asp	Lys	Pro	Asn	Arg	Val	Thr	Lys	Val	Ala	
			500					505					510			
Val	Lys	Met	Leu	Lys	Ser	Asp	Ala	Thr	Glu	Lys	Asp	Leu	Ser	Asp	Leu	
		515					520					525				
Ile	Ser	Glu	Met	Glu	Met	Met	Lys	Met	Ile	Gly	Lys	His	Lys	Asn	Ile	
	530					535					540					
Ile	Asn	Leu	Leu	Gly	Ala	Cys	Thr	Gln	Asp	Gly	Pro	Leu	Tyr	Val	Ile	
545					550					555					560	
Val	Glu	Tyr	Ala	Ser	Lys	Gly	Asn	Leu	Arg	Glu	Tyr	Leu	Gln	Ala	Arg	
				565					570					575		
Arg	Pro	Pro	Gly	Leu	Glu	Tyr	Cys	Tyr	Asn	Pro	Ser	His	Asn	Pro	Glu	
			580					585					590			
Glu	Gln	Leu	Ser	Ser	Lys	Asp	Leu	Val	Ser	Cys	Ala	Tyr	Gln	Val	Ala	
		595					600					605				
Arg	Gly	Met	Glu	Tyr	Leu	Ala	Ser	Lys	Lys	Cys	Ile	His	Arg	Asp	Leu	
	610					615					620					
Ala	Ala	Arg	Asn	Val	Leu	Val	Thr	Glu	Asp	Asn	Val	Met	Lys	Ile	Ala	
625					630					635					640	
Asp	Phe	Gly	Leu	Ala	Arg	Asp	Ile	His	His	Ile	Asp	Tyr	Tyr	Lys	Lys	
				645					650					655		
Thr	Thr	Asn	Gly	Arg	Leu	Pro	Val	Lys	Trp	Met	Ala	Pro	Glu	Ala	Leu	
			660					665					670			
Phe	Asp	Arg	Ile	Tyr	Thr	His	Gln	Ser	Asp	Val	Trp	Ser	Phe	Gly	Val	
		675					680					685				
Pro	His	Thr	Pro	Val	Cys	Leu	Trp	Arg	Asn	Phe	Ser	Ser	Cys			
	690					695					700					

<210> 48
 <211> 295
 <212> PRT
 <213> Homo sapiens

<400> 48

Met	Pro	Lys	Arg	Gly	Lys	Lys	Gly	Ala	Val	Ala	Glu	Asp	Gly	Asp	Glu
1				5					10					15	
Leu	Arg	Thr	Glu	Pro	Glu	Ala	Lys	Lys	Ser	Lys	Thr	Ala	Ala	Lys	Lys
			20					25					30		
Asn	Asp	Lys	Glu	Ala	Ala	Gly	Glu	Gly	Pro	Ala	Leu	Tyr	Glu	Asp	Pro
		35					40					45			
Pro	Asp	Gln	Lys	Thr	Ser	Pro	Ser	Gly	Lys	Pro	Ala	Thr	Leu	Lys	Ile
	50					55					60				
Cys	Ser	Trp	Asn	Val	Asp	Gly	Leu	Arg	Ala	Trp	Ile	Lys	Lys	Lys	Gly
65					70					75					80
Leu	Asp	Trp	Val	Lys	Glu	Glu	Ala	Pro	Asp	Ile	Leu	Cys	Leu	Gln	Glu
				85					90					95	
Thr	Lys	Cys	Ser	Glu	Asn	Lys	Leu	Pro	Ala	Glu	Leu	Gln	Glu	Leu	Pro
			100					105					110		
Gly	Leu	Ser	His	Gln	Tyr	Trp	Ser	Ala	Pro	Ser	Asp	Lys	Glu	Gly	Tyr
		115					120					125			
Ser	Gly	Val	Gly	Leu	Leu	Ser	Arg	Gln	Cys	Pro	Leu	Lys	Val	Ser	Tyr
	130					135					140				
Gly	Ile	Ala	Tyr	Val	Pro	Asn	Ala	Gly	Arg	Gly	Leu	Val	Arg	Leu	Glu
145					150					155					160
Tyr	Arg	Gln	Arg	Trp	Asp	Glu	Ala	Phe	Arg	Lys	Phe	Leu	Lys	Gly	Leu
				165					170					175	
Ala	Ser	Arg	Lys	Pro	Leu	Val	Leu	Cys	Gly	Asp	Leu	Asn	Val	Ala	His
			180					185					190		
Glu	Glu	Ile	Asp	Leu	Arg	Asn	Pro	Lys	Gly	Asn	Lys	Lys	Asn	Ala	Gly
		195					200					205			
Phe	Thr	Pro	Gln	Glu	Arg	Gln	Gly	Phe	Gly	Glu	Leu	Leu	Gln	Ala	Val
	210					215					220				
Pro	Leu	Ala	Asp	Ser	Phe	Arg	His	Leu	Tyr	Pro	Asn	Thr	Pro	Tyr	Ala
225					230					235					240
Tyr	Thr	Phe	Trp	Thr	Tyr	Met	Met	Asn	Ala	Arg	Ser	Lys	Asn	Val	Gly
				245					250					255	

Trp Arg Leu Asp Tyr Phe Leu Leu Ser His Ser Leu Leu Pro Ala Leu
 260 265 270

Cys Asp Ser Lys Ile Arg Ser Lys Ala Leu Gly Ser Asp His Cys Pro
 275 280 285

Ile Thr Leu Tyr Leu Ala Leu
 290 295

<210> 49
 <211> 342
 <212> PRT
 <213> Homo sapiens

<400> 49
 Met Pro Lys Arg Gly Lys Lys Gly Ala Val Ala Glu Asp Gly Asp Glu
 1 5 10 15

Leu Arg Thr Gly Lys Gly Met Lys Ser Ala Leu Leu Pro Arg Asn Cys
 20 25 30

Gly Gly Gly Val Cys His Ser Leu Asp Val Arg Glu Pro Glu Ala Lys
 35 40 45

Lys Ser Lys Thr Ala Ala Lys Lys Asn Asp Lys Glu Ala Ala Gly Glu
 50 55 60

Gly Pro Ala Leu Tyr Glu Asp Pro Pro Asp Gln Lys Thr Ser Pro Ser
 65 70 75 80

Gly Lys Pro Ala Thr Leu Lys Ile Cys Ser Trp Asn Val Asp Gly Leu
 85 90 95

Arg Ala Trp Ile Lys Lys Lys Gly Leu Asp Trp Val Lys Glu Glu Ala
 100 105 110

Pro Asp Ile Leu Cys Leu Gln Glu Thr Lys Cys Ser Glu Asn Lys Leu
 115 120 125

Pro Ala Glu Leu Gln Glu Leu Pro Gly Leu Ser His Gln Tyr Trp Ser
 130 135 140

Ala Pro Ser Asp Lys Glu Gly Tyr Ser Gly Val Gly Leu Leu Ser Arg
 145 150 155 160

Gln Cys Pro Leu Lys Val Ser Tyr Gly Ile Gly Asp Glu Glu His Asp
 165 170 175

Gln Glu Gly Arg Val Ile Val Ala Glu Phe Asp Ser Phe Val Leu Val
 180 185 190

Thr Ala Tyr Val Pro Asn Ala Gly Arg Gly Leu Val Arg Leu Glu Tyr
 195 200 205

Arg Gln Arg Trp Asp Glu Ala Phe Arg Lys Phe Leu Lys Gly Leu Ala

210					215					220					
Ser	Arg	Lys	Pro	Leu	Val	Leu	Cys	Gly	Asp	Leu	Asn	Val	Ala	His	Glu
225					230					235					240
Glu	Ile	Asp	Leu	Arg	Asn	Pro	Lys	Gly	Asn	Lys	Lys	Asn	Ala	Gly	Phe
				245					250					255	
Thr	Pro	Gln	Glu	Arg	Gln	Gly	Phe	Gly	Glu	Leu	Leu	Gln	Ala	Val	Pro
			260					265					270		
Leu	Ala	Asp	Ser	Phe	Arg	His	Leu	Tyr	Pro	Asn	Thr	Pro	Tyr	Ala	Tyr
		275					280					285			
Thr	Phe	Trp	Thr	Tyr	Met	Met	Asn	Ala	Arg	Ser	Lys	Asn	Val	Gly	Trp
	290					295					300				
Arg	Leu	Asp	Tyr	Phe	Leu	Leu	Ser	His	Ser	Leu	Leu	Pro	Ala	Leu	Cys
305					310					315					320
Asp	Ser	Lys	Ile	Arg	Ser	Lys	Ala	Leu	Gly	Ser	Asp	His	Cys	Pro	Ile
				325					330					335	
Thr	Leu	Tyr	Leu	Ala	Leu										
			340												

<210> 50
 <211> 305
 <212> PRT
 <213> Homo sapiens

<400> 50
 Met Phe Gln Ala Ala Glu Arg Pro Gln Glu Trp Ala Met Glu Gly Pro
 1 5 10 15
 Arg Asp Gly Leu Lys Lys Glu Arg Leu Leu Asp Asp Arg His Asp Ser
 20 25 30
 Gly Leu Asp Ser Met Lys Asp Glu Glu Tyr Glu Gln Met Val Lys Glu
 35 40 45
 Leu Gln Glu Ile Arg Leu Glu Pro Gln Glu Val Pro Arg Gly Ser Glu
 50 55 60
 Pro Trp Lys Gln Gln Leu Thr Glu Asp Gly Asp Ser Phe Leu His Leu
 65 70 75 80
 Ala Ile Ile His Glu Glu Lys Ala Leu Thr Met Glu Val Ile Arg Gln
 85 90 95
 Val Lys Gly Asp Leu Ala Phe Leu Asn Phe Gln Asn Asn Leu Gln Gln
 100 105 110
 Thr Pro Leu His Leu Ala Val Ile Thr Asn Gln Pro Glu Ile Ala Glu
 115 120 125

Ala Leu Leu Gly Ala Gly Cys Asp Pro Glu Leu Arg Asp Phe Arg Gly
 130 135 140
 Asn Thr Pro Leu His Leu Ala Cys Glu Gln Gly Cys Leu Ala Ser Val
 145 150 155 160
 Gly Val Leu Thr Gln Ser Cys Thr Thr Pro His Leu His Ser Ile Leu
 165 170 175
 Lys Ala Thr Asn Tyr Asn Gly His Thr Cys Leu His Leu Ala Ser Ile
 180 185 190
 His Gly Tyr Leu Gly Ile Val Glu Leu Leu Val Ser Leu Gly Ala Asp
 195 200 205
 Val Asn Ala Gln Glu Pro Cys Asn Gly Arg Thr Ala Leu His Leu Ala
 210 215 220
 Val Asp Leu Gln Asn Pro Asp Leu Val Ser Leu Leu Leu Lys Cys Gly
 225 230 235 240
 Ala Asp Val Asn Arg Val Thr Tyr Gln Gly Tyr Ser Pro Tyr Gln Leu
 245 250 255
 Thr Trp Gly Arg Pro Ser Thr Arg Ile Gln Gln Gln Leu Gly Gln Leu
 260 265 270
 Thr Leu Glu Asn Leu Gln Met Leu Pro Glu Ser Glu Asp Glu Glu Ser
 275 280 285
 Tyr Asp Thr Glu Ser Glu Phe Thr Glu Phe Thr Glu Asp Glu Val Ser
 290 295 300

Leu
 305

<210> 51
 <211> 289
 <212> PRT
 <213> Homo sapiens

<400> 51
 Met Phe Gln Ala Ala Glu Arg Pro Gln Glu Trp Ala Met Glu Gly Pro
 1 5 10 15
 Arg Asp Gly Leu Lys Lys Glu Arg Leu Leu Asp Asp Arg His Asp Ser
 20 25 30
 Gly Leu Asp Ser Met Lys Asp Glu Glu Tyr Glu Gln Met Val Lys Glu
 35 40 45
 Leu Gln Glu Ile Arg Leu Glu Pro Gln Glu Val Pro Arg Gly Ser Glu
 50 55 60

Pro Trp Lys Gln Gln Leu Thr Glu Asp Gly Asp Ser Phe Leu His Leu
 65 70 75 80
 Ala Ile Ile His Glu Glu Lys Ala Leu Thr Met Glu Val Ile Arg Gln
 85 90 95
 Val Lys Gly Asp Leu Ala Phe Leu Asn Phe Gln Asn Asn Leu Gln Gln
 100 105 110
 Thr Pro Leu His Leu Ala Val Ile Thr Asn Gln Pro Glu Ile Ala Glu
 115 120 125
 Ala Leu Leu Gly Ala Gly Cys Asp Pro Glu Leu Arg Asp Phe Arg Gly
 130 135 140
 Asn Thr Pro Leu His Leu Ala Cys Glu Gln Gly Cys Leu Ala Ser Val
 145 150 155 160
 Gly Val Leu Thr Gln Ser Cys Thr Thr Pro His Leu His Ser Ile Leu
 165 170 175
 Lys Ala Thr Asn Tyr Asn Gly Gln Glu Pro Cys Asn Gly Arg Thr Ala
 180 185 190
 Leu His Leu Ala Val Asp Leu Gln Asn Pro Asp Leu Val Ser Leu Leu
 195 200 205
 Leu Lys Cys Gly Ala Asp Val Asn Arg Val Thr Tyr Gln Gly Tyr Ser
 210 215 220
 Pro Tyr Gln Leu Thr Trp Gly Arg Pro Ser Thr Arg Ile Gln Gln Gln
 225 230 235 240
 Leu Gly Gln Leu Thr Leu Glu Asn Leu Gln Met Leu Pro Glu Ser Glu
 245 250 255
 Asp Glu Glu Ser Tyr Asp Thr Glu Ser Glu Phe Thr Glu Phe Thr Glu
 260 265 270
 Asp Glu Leu Pro Tyr Asp Asp Cys Val Phe Gly Gly Gln Arg Leu Thr
 275 280 285

Leu

<210> 52
 <211> 921
 <212> PRT
 <213> Homo sapiens

<400> 52
 Met Ala Gly Ile Phe Tyr Phe Ala Leu Phe Ser Cys Leu Phe Gly Ile
 1 5 10 15

Cys Asp Ala Val Thr Gly Ser Arg Val Tyr Pro Ala Asn Glu Val Thr

20					25					30					
Leu	Leu	Asp	Ser	Arg	Ser	Val	Gln	Gly	Glu	Leu	Gly	Trp	Ile	Ala	Ser
		35					40					45			
Pro	Leu	Glu	Gly	Gly	Trp	Glu	Glu	Val	Ser	Ile	Met	Asp	Glu	Lys	Asn
	50					55					60				
Thr	Pro	Ile	Arg	Thr	Tyr	Gln	Val	Cys	Asn	Val	Met	Glu	Pro	Ser	Gln
	65					70					75				80
Asn	Asn	Trp	Leu	Arg	Thr	Asp	Trp	Ile	Thr	Arg	Glu	Gly	Ala	Gln	Arg
				85					90					95	
Val	Tyr	Ile	Glu	Ile	Lys	Phe	Thr	Leu	Arg	Asp	Cys	Asn	Ser	Leu	Pro
			100					105					110		
Gly	Val	Met	Gly	Thr	Cys	Lys	Glu	Thr	Phe	Asn	Leu	Tyr	Tyr	Tyr	Glu
		115					120					125			
Ser	Asp	Asn	Asp	Lys	Glu	Arg	Phe	Ile	Arg	Glu	Asn	Gln	Phe	Val	Lys
	130					135					140				
Ile	Asp	Thr	Ile	Ala	Ala	Asp	Glu	Ser	Phe	Thr	Gln	Val	Asp	Ile	Gly
	145					150					155				160
Asp	Arg	Ile	Met	Lys	Leu	Asn	Thr	Glu	Ile	Arg	Asp	Val	Gly	Pro	Leu
				165					170					175	
Ser	Lys	Lys	Gly	Phe	Tyr	Leu	Ala	Phe	Gln	Asp	Val	Gly	Ala	Cys	Ile
			180					185					190		
Ala	Leu	Val	Ser	Val	Arg	Val	Phe	Tyr	Lys	Lys	Cys	Pro	Leu	Thr	Val
		195					200					205			
Arg	Asn	Leu	Ala	Gln	Phe	Pro	Asp	Thr	Ile	Thr	Gly	Ala	Asp	Thr	Ser
	210					215					220				
Ser	Leu	Val	Glu	Val	Arg	Gly	Ser	Cys	Val	Asn	Asn	Ser	Glu	Glu	Lys
	225					230					235				240
Asp	Val	Pro	Lys	Met	Tyr	Cys	Gly	Ala	Asp	Gly	Glu	Trp	Leu	Val	Pro
				245					250				255		
Ile	Gly	Asn	Cys	Leu	Cys	Asn	Ala	Gly	His	Glu	Glu	Arg	Ser	Gly	Glu
		260						265					270		
Cys	Gln	Ala	Cys	Lys	Ile	Gly	Tyr	Tyr	Lys	Ala	Leu	Ser	Thr	Asp	Ala
		275					280					285			
Thr	Cys	Ala	Lys	Cys	Pro	Pro	His	Ser	Tyr	Ser	Val	Trp	Glu	Gly	Ala
	290					295					300				
Thr	Ser	Cys	Thr	Cys	Asp	Arg	Gly	Phe	Phe	Arg	Ala	Asp	Asn	Asp	Ala
	305					310					315				320
Ala	Ser	Met	Pro	Cys	Thr	Arg	Pro	Pro	Ser	Ala	Pro	Leu	Asn	Leu	Ile

325										330					335				
Ser	Asn	Val	Asn	Glu	Thr	Ser	Val	Asn	Leu	Glu	Trp	Ser	Ser	Pro	Gln				
			340					345					350						
Asn	Thr	Gly	Gly	Arg	Gln	Asp	Ile	Ser	Tyr	Asn	Val	Val	Cys	Lys	Lys				
		355					360					365							
Cys	Gly	Ala	Gly	Asp	Pro	Ser	Lys	Cys	Arg	Pro	Cys	Gly	Ser	Gly	Val				
	370					375					380								
His	Tyr	Thr	Pro	Gln	Gln	Asn	Gly	Leu	Lys	Thr	Thr	Lys	Val	Ser	Ile				
385					390					395					400				
Thr	Asp	Leu	Leu	Ala	His	Thr	Asn	Tyr	Thr	Phe	Glu	Ile	Trp	Ala	Val				
				405					410					415					
Asn	Gly	Val	Ser	Lys	Tyr	Asn	Pro	Asn	Pro	Asp	Gln	Ser	Val	Ser	Val				
			420					425					430						
Thr	Val	Thr	Thr	Asn	Gln	Ala	Ala	Pro	Ser	Ser	Ile	Ala	Leu	Val	Gln				
		435					440					445							
Ala	Lys	Glu	Val	Thr	Arg	Tyr	Ser	Val	Ala	Leu	Ala	Trp	Leu	Glu	Pro				
	450					455					460								
Asp	Arg	Pro	Asn	Gly	Val	Ile	Leu	Glu	Tyr	Glu	Val	Lys	Tyr	Tyr	Glu				
465				470					475						480				
Lys	Asp	Gln	Asn	Glu	Arg	Ser	Tyr	Arg	Ile	Val	Arg	Thr	Ala	Ala	Arg				
			485					490						495					
Asn	Thr	Asp	Ile	Lys	Gly	Leu	Asn	Pro	Leu	Thr	Ser	Tyr	Val	Phe	His				
			500					505					510						
Val	Arg	Ala	Arg	Thr	Ala	Ala	Gly	Tyr	Gly	Asp	Phe	Ser	Glu	Pro	Leu				
		515					520					525							
Glu	Val	Thr	Thr	Asn	Thr	Val	Pro	Ser	Arg	Ile	Ile	Gly	Asp	Gly	Ala				
	530					535					540								
Asn	Ser	Thr	Val	Leu	Leu	Val	Ser	Val	Ser	Gly	Ser	Val	Val	Leu	Val				
545				550						555				560					
Val	Ile	Leu	Ile	Ala	Ala	Phe	Val	Ile	Ser	Arg	Arg	Arg	Ser	Lys	Tyr				
			565					570						575					
Ser	Lys	Ala	Lys	Gln	Glu	Ala	Asp	Glu	Glu	Lys	His	Leu	Asn	Gln	Gly				
			580					585					590						
Val	Arg	Thr	Tyr	Val	Asp	Pro	Phe	Thr	Tyr	Glu	Asp	Pro	Asn	Gln	Ala				
		595					600					605							
Val	Arg	Glu	Phe	Ala	Lys	Glu	Ile	Asp	Ala	Ser	Cys	Ile	Lys	Ile	Glu				
	610					615					620								
Lys	Val	Ile	Gly	Val	Gly	Glu	Phe	Gly	Glu	Val	Cys	Ser	Gly	Arg	Leu				

625		630		635		640
Lys Val Pro Gly	Lys Arg Glu Ile Cys Val	Ala Ile Lys Thr	Leu Lys			
	645		650		655	
Ala Gly Tyr Thr	Asp Lys Gln Arg	Arg Asp Phe Leu Ser	Glu Ala Ser			
	660	665	670			
Ile Met Gly Gln Phe	Asp His Pro Asn Ile Ile	His Leu Glu Gly	Val			
	675	680	685			
Val Thr Lys Cys Lys	Pro Val Met Ile Ile Thr	Glu Tyr Met Glu	Asn			
	690	695	700			
Gly Ser Leu Asp Ala	Phe Leu Arg Lys Asn Asp	Gly Arg Phe Thr	Val			
705	710	715	720			
Ile Gln Leu Val Gly	Met Leu Arg Gly Ile Gly	Ser Gly Met Lys Tyr				
	725	730	735			
Leu Ser Asp Met Ser	Tyr Val His Arg Asp	Leu Ala Ala Arg	Asn Ile			
	740	745	750			
Leu Val Asn Ser Asn	Leu Val Cys Lys Val Ser	Asp Phe Gly Met Ser				
	755	760	765			
Arg Val Leu Glu Asp	Asp Pro Glu Ala Ala Tyr	Thr Thr Arg Gly Gly				
	770	775	780			
Lys Ile Pro Ile Arg	Trp Thr Ala Pro Glu Ala	Ile Ala Tyr Arg Lys				
785	790	795	800			
Phe Thr Ser Ala Ser	Asp Val Trp Ser Tyr Gly	Ile Val Met Trp Glu				
	805	810	815			
Val Met Ser Tyr Gly	Glu Arg Pro Tyr Trp Asp	Met Ser Asn Gln Asp				
	820	825	830			
Pro Asn Thr Ala Leu	Leu Asp Pro Ser Ser Pro	Glu Phe Ser Ala Val				
	835	840	845			
Val Ser Val Gly Asp	Trp Leu Gln Ala Ile Lys	Met Asp Arg Tyr Lys				
	850	855	860			
Asp Asn Phe Thr Ala	Ala Gly Tyr Thr Thr	Leu Glu Ala Val Val	His			
865	870	875	880			
Val Asn Gln Glu Asp	Leu Ala Arg Ile Gly	Ile Thr Ala Ile Thr	His			
	885	890	895			
Gln Asn Lys Ile Leu	Ser Ser Val Gln Ala Met	Arg Thr Gln Met Gln				
	900	905	910			
Gln Met His Gly Arg	Met Val Pro Val					
	915	920				

<213> Homo sapiens

<400> 53

15

30

45

60

80

95

110

125

140

160

175

190

205

220

240

255

270

Ser Gln Ser Ser Leu Leu Asp Val Gln Arg Val Pro Ser Phe Glu Ser
 275 280 285
 Phe Glu Asp Asp Cys Ser Gln Ser Leu Cys Leu Asn Lys Pro Thr Met
 290 295 300
 Ser Phe Lys Asp Tyr Ile Gln Glu Arg Ser Asp Pro Val Glu Gln Gly
 305 310 315 320
 Lys Pro Val Ile Pro Ala Ala Val Leu Ala Gly Phe Thr Gly Ser Gly
 325 330 335
 Pro Ile Gln Leu Trp Gln Phe Leu Leu Glu Leu Leu Ser Asp Lys Ser
 340 345 350
 Cys Gln Ser Phe Ile Ser Trp Thr Gly Asp Gly Trp Glu Phe Lys Leu
 355 360 365
 Ala Asp Pro Asp Glu Val Ala Arg Arg Trp Gly Lys Arg Lys Asn Lys
 370 375 380
 Pro Lys Met Asn Tyr Glu Lys Leu Ser Arg Gly Leu Arg Tyr Tyr Tyr
 385 390 395 400
 Asp Lys Asn Ile Ile His Lys Thr Ser Gly Lys Arg Tyr Val Tyr Arg
 405 410 415
 Phe Val Cys Asp Leu Gln Asn Leu Leu Gly Phe Thr Pro Glu Glu Leu
 420 425 430
 His Ala Ile Leu Gly Val Gln Pro Asp Thr Glu Asp
 435 440

<210> 54
 <211> 260
 <212> PRT
 <213> Homo sapiens

<400> 54
 Met Ala Gly Ser Ala Met Ser Ser Lys Phe Phe Leu Val Ala Leu Ala
 1 5 10 15
 Ile Phe Phe Ser Phe Ala Gln Val Val Ile Glu Ala Asn Ser Trp Trp
 20 25 30
 Ser Leu Gly Met Asn Asn Pro Val Gln Met Ser Glu Val Tyr Ile Ile
 35 40 45
 Gly Ala Gln Pro Leu Cys Ser Gln Leu Ala Gly Leu Ser Gln Gly Gln
 50 55 60
 Lys Lys Leu Cys His Leu Tyr Gln Asp His Met Gln Tyr Ile Gly Glu
 65 70 75 80

Gly Ala Lys Thr Gly Ile Lys Glu Cys Gln Tyr Gln Phe Arg His Arg
 85 90 95
 Arg Trp Asn Cys Ser Thr Val Asp Asn Thr Ser Val Phe Gly Arg Val
 100 105 110
 Met Gln Ile Gly Ser Arg Glu Thr Ala Phe Thr Tyr Ala Val Ser Ala
 115 120 125
 Ala Gly Val Val Asn Ala Met Ser Arg Ala Cys Arg Glu Gly Glu Leu
 130 135 140
 Ser Thr Cys Gly Cys Ser Arg Ala Ala Arg Pro Lys Asp Leu Pro Arg
 145 150 155 160
 Asp Trp Leu Trp Gly Gly Cys Gly Asp Asn Ile Asp Tyr Gly Tyr Arg
 165 170 175
 Phe Ala Lys Glu Phe Val Asp Ala Arg Glu Arg Glu Arg Ile His Ala
 180 185 190
 Lys Gly Ser Tyr Glu Ser Ala Arg Ile Leu Met Asn Leu His Asn Asn
 195 200 205
 Glu Ala Gly Arg Arg Thr Val Tyr Asn Leu Ala Asp Val Ala Cys Lys
 210 215 220
 Cys His Gly Val Ser Gly Ser Cys Ser Leu Lys Thr Cys Trp Leu Gln
 225 230 235 240
 Leu Ala Asp Phe Arg Lys Val Gly Asp Ala Leu Lys Glu Lys Tyr Asp
 245 250 255
 Thr Leu Val Gly
 260

<210> 55
 <211> 719
 <212> PRT
 <213> Homo sapiens

<400> 55
 Met Ala Leu Arg Arg Ser Met Gly Arg Pro Gly Leu Pro Pro Leu Pro
 1 5 10 15
 Leu Pro Pro Pro Pro Arg Leu Gly Leu Leu Leu Ala Glu Ser Ala Ala
 20 25 30
 Ala Gly Leu Lys Leu Met Gly Ala Pro Val Lys Leu Thr Val Ser Gln
 35 40 45
 Gly Gln Pro Val Lys Leu Asn Cys Ser Val Glu Gly Met Glu Glu Pro
 50 55 60
 Asp Ile Gln Trp Val Lys Asp Gly Ala Val Val Gln Asn Leu Asp Gln

65	70					75					80				
Leu Tyr Ile Pro Val Ser Glu Gln His Trp Ile Gly Phe Leu Ser Leu	85					90					95				
Lys Ser Val Glu Arg Ser Asp Ala Gly Arg Tyr Trp Cys Gln Val Glu	100					105					110				
Asp Gly Gly Glu Thr Glu Ile Ser Gln Pro Val Trp Leu Thr Val Glu	115					120					125				
Gly Val Pro Phe Phe Thr Val Glu Pro Lys Asp Leu Ala Val Pro Pro	130					135					140				
Asn Ala Pro Phe Gln Leu Ser Cys Glu Ala Val Gly Pro Pro Glu Pro	145					150					155				
Val Thr Ile Val Trp Trp Arg Gly Thr Thr Lys Ile Gly Gly Pro Ala	165					170					175				
Pro Ser Pro Ser Val Leu Asn Val Thr Gly Val Thr Gln Ser Thr Met	180					185					190				
Phe Ser Cys Glu Ala His Asn Leu Lys Gly Leu Ala Ser Ser Arg Thr	195					200					205				
Ala Thr Val His Leu Gln Ala Leu Pro Ala Ala Pro Phe Asn Ile Thr	210					215					220				
Val Thr Lys Leu Ser Ser Ser Asn Ala Ser Val Ala Trp Met Pro Gly	225					230					235				
Ala Asp Gly Arg Ala Leu Leu Gln Ser Cys Thr Val Gln Val Thr Gln	245					250					255				
Ala Pro Gly Gly Trp Glu Val Leu Ala Val Val Val Pro Val Pro Pro	260					265					270				
Phe Thr Cys Leu Leu Arg Asp Leu Val Pro Ala Thr Asn Tyr Ser Leu	275					280					285				
Arg Val Arg Cys Ala Asn Ala Leu Gly Pro Ser Pro Tyr Ala Asp Trp	290					295					300				
Val Pro Phe Gln Thr Lys Gly Leu Ala Pro Ala Ser Ala Pro Gln Asn	305					310					315				
Leu His Ala Ile Arg Thr Asp Ser Gly Leu Ile Leu Glu Trp Glu Glu	325					330					335				
Val Ile Pro Glu Ala Pro Leu Glu Gly Pro Leu Gly Pro Tyr Lys Leu	340					345					350				
Ser Trp Val Gln Asp Asn Gly Thr Gln Asp Glu Leu Thr Val Glu Gly	355					360					365				
Thr Arg Ala Asn Leu Thr Gly Trp Asp Pro Gln Lys Asp Leu Ile Val															

370					375					380					
Arg	Val	Cys	Val	Ser	Asn	Ala	Val	Gly	Cys	Gly	Pro	Trp	Ser	Gln	Pro
385					390					395					400
Leu	Val	Val	Ser	Ser	His	Asp	Arg	Ala	Gly	Gln	Gln	Gly	Pro	Pro	His
				405					410					415	
Ser	Arg	Thr	Ser	Trp	Val	Pro	Val	Val	Leu	Gly	Val	Leu	Thr	Ala	Leu
			420					425					430		
Val	Thr	Ala	Ala	Ala	Leu	Ala	Leu	Ile	Leu	Leu	Arg	Lys	Arg	Arg	Lys
		435					440					445			
Glu	Thr	Arg	Phe	Gly	Gln	Ala	Phe	Asp	Ser	Val	Met	Ala	Arg	Gly	Glu
	450					455					460				
Pro	Ala	Val	His	Phe	Arg	Ala	Ala	Arg	Ser	Phe	Asn	Arg	Glu	Arg	Pro
465					470					475					480
Glu	Arg	Ile	Glu	Ala	Thr	Leu	Asp	Ser	Leu	Gly	Ile	Ser	Asp	Glu	Leu
				485					490					495	
Lys	Glu	Lys	Leu	Glu	Asp	Val	Leu	Ile	Pro	Glu	Gln	Gln	Phe	Thr	Leu
			500					505					510		
Gly	Arg	Met	Leu	Gly	Lys	Gly	Glu	Phe	Gly	Ser	Val	Arg	Glu	Ala	Gln
		515					520					525			
Leu	Lys	Gln	Glu	Asp	Gly	Ser	Phe	Val	Lys	Val	Ala	Val	Lys	Met	Leu
	530					535					540				
Lys	Ala	Asp	Ile	Ile	Ala	Ser	Ser	Asp	Ile	Glu	Glu	Phe	Leu	Arg	Glu
545					550					555					560
Ala	Ala	Cys	Met	Lys	Glu	Phe	Asp	His	Pro	His	Val	Ala	Lys	Leu	Val
				565					570					575	
Gly	Val	Ser	Leu	Arg	Ser	Arg	Ala	Lys	Gly	Arg	Leu	Pro	Ile	Pro	Met
			580					585					590		
Val	Ile	Leu	Pro	Phe	Met	Lys	His	Gly	Asp	Leu	His	Ala	Phe	Leu	Leu
		595					600					605			
Ala	Ser	Arg	Ile	Gly	Glu	Asn	Pro	Phe	Asn	Leu	Pro	Leu	Gln	Thr	Leu
	610					615					620				
Ile	Arg	Phe	Met	Val	Asp	Ile	Ala	Cys	Gly	Met	Glu	Tyr	Leu	Ser	Ser
625					630					635					640
Arg	Asn	Phe	Ile	His	Arg	Asp	Leu	Ala	Ala	Arg	Asn	Cys	Met	Leu	Ala
				645					650					655	
Glu	Asp	Met	Thr	Val	Cys	Val	Ala	Asp	Phe	Gly	Leu	Ser	Arg	Lys	Ile
		660						665					670		
Tyr	Ser	Asp	Cys	Arg	Tyr	Ile	Leu	Thr	Pro	Gly	Gly	Leu	Ala	Glu	Gln

675	680	685
Pro Gly Gln Ala Glu His Gln Pro Glu Ser Pro Leu Asn Glu Thr Gln		
690	695	700
Arg Leu Leu Leu Leu Gln Gln Gly Leu Leu Pro His Ser Ser Cys		
705	710	715

<210> 56
 <211> 848
 <212> PRT
 <213> Homo sapiens

<400> 56
Met Cys Arg Ile Ala Gly Ala Leu Arg Thr Leu Leu Pro Leu Leu Ala
1 5 10 15
Ala Leu Leu Gln Ala Ser Val Glu Ala Ser Gly Glu Ile Ala Leu Cys
20 25 30
Lys Thr Gly Phe Pro Glu Asp Val Tyr Ser Ala Val Leu Ser Lys Asp
35 40 45
Val His Glu Gly Gln Pro Leu Leu Asn Val Lys Phe Ser Asn Cys Asn
50 55 60
Gly Lys Arg Lys Val Gln Tyr Glu Ser Ser Glu Pro Ala Asp Phe Lys
65 70 75 80
Val Asp Glu Asp Gly Met Val Tyr Ala Val Arg Ser Phe Pro Leu Ser
85 90 95
Ser Glu His Ala Lys Phe Leu Ile Tyr Ala Gln Asp Lys Glu Thr Gln
100 105 110
Glu Lys Trp Gln Val Ala Val Lys Leu Ser Leu Lys Pro Thr Leu Thr
115 120 125
Glu Glu Ser Val Lys Glu Ser Ala Glu Val Glu Glu Ile Val Phe Pro
130 135 140
Arg Gln Phe Ser Lys His Ser Gly His Leu Gln Arg Gln Lys Arg Asp
145 150 155 160
Trp Val Ile Pro Pro Ile Asn Leu Pro Glu Asn Ser Arg Gly Pro Phe
165 170 175
Pro Gln Glu Leu Val Arg Ile Arg Ser Asp Arg Asp Lys Asn Leu Ser
180 185 190
Leu Arg Tyr Ser Val Thr Gly Pro Gly Ala Asp Gln Pro Pro Thr Gly
195 200 205
Ile Phe Ile Ile Asn Pro Ile Ser Gly Gln Leu Ser Val Thr Lys Pro
210 215 220

Leu	Asp	Arg	Glu	Gln	Ile	Ala	Arg	Phe	His	Leu	Arg	Ala	His	Ala	Val	
225					230					235					240	
Asp	Ile	Asn	Gly	Asn	Gln	Val	Glu	Asn	Pro	Ile	Asp	Ile	Val	Ile	Asn	
			245						250					255		
Val	Ile	Asp	Met	Asn	Asp	Asn	Arg	Pro	Glu	Phe	Leu	His	Gln	Val	Trp	
		260						265					270			
Asn	Gly	Thr	Val	Pro	Glu	Gly	Ser	Lys	Pro	Gly	Thr	Tyr	Val	Met	Thr	
		275					280					285				
Val	Thr	Ala	Ile	Asp	Ala	Asp	Asp	Pro	Asn	Ala	Leu	Asn	Gly	Met	Leu	
	290					295					300					
Arg	Tyr	Arg	Ile	Val	Ser	Gln	Ala	Pro	Ser	Thr	Pro	Ser	Pro	Asn	Met	
305					310					315					320	
Phe	Thr	Ile	Asn	Asn	Glu	Thr	Gly	Asp	Ile	Ile	Thr	Val	Ala	Ala	Gly	
			325					330						335		
Leu	Asp	Arg	Glu	Lys	Val	Gln	Gln	Tyr	Thr	Leu	Ile	Ile	Gln	Ala	Thr	
		340						345					350			
Asp	Met	Glu	Gly	Asn	Pro	Thr	Tyr	Gly	Leu	Ser	Asn	Thr	Ala	Thr	Ala	
		355					360					365				
Val	Ile	Thr	Val	Thr	Asp	Val	Asn	Asp	Asn	Pro	Pro	Glu	Phe	Thr	Ala	
	370					375					380					
Met	Thr	Phe	Tyr	Gly	Glu	Val	Pro	Glu	Asn	Arg	Val	Asp	Ile	Ile	Val	
385				390					395						400	
Ala	Asn	Leu	Thr	Val	Thr	Asp	Lys	Asp	Gln	Pro	His	Thr	Pro	Ala	Trp	
			405						410					415		
Asn	Ala	Val	Tyr	Arg	Ile	Ser	Gly	Gly	Asp	Pro	Thr	Gly	Arg	Phe	Ala	
		420						425					430			
Ile	Gln	Thr	Asp	Pro	Asn	Ser	Asn	Asp	Gly	Leu	Val	Thr	Val	Val	Lys	
	435						440					445				
Pro	Ile	Asp	Phe	Glu	Thr	Asn	Arg	Met	Phe	Val	Leu	Thr	Val	Ala	Ala	
	450					455					460					
Glu	Asn	Gln	Val	Pro	Leu	Ala	Lys	Gly	Ile	Gln	His	Pro	Pro	Gln	Ser	
465					470					475					480	
Thr	Ala	Thr	Val	Ser	Val	Thr	Val	Ile	Asp	Val	Asn	Glu	Asn	Pro	Tyr	
			485						490					495		
Phe	Ala	Pro	Asn	Pro	Lys	Ile	Ile	Arg	Gln	Glu	Glu	Gly	Leu	His	Ala	
		500						505					510			
Gly	Thr	Met	Leu	Thr	Thr	Phe	Thr	Ala	Gln	Asp	Pro	Asp	Arg	Tyr	Met	
	515						520					525				

Gly Asp Phe Ile Asn Glu Lys Thr Trp Pro Ile Gln Ser Leu His Leu
835 840 845

<210> 57
<211> 103
<212> PRT
<213> Homo sapiens

<400> 57
Met Glu Arg Val Lys Met Ile Asn Val Gln Arg Leu Leu Glu Ala Ala
1 5 10 15
Glu Phe Leu Glu Arg Arg Glu Arg Glu Cys Glu His Gly Tyr Ala Ser
20 25 30
Ser Phe Pro Ser Met Pro Ser Pro Arg Leu Gln His Ser Lys Pro Pro
35 40 45
Arg Arg Leu Ser Arg Ala Gln Lys His Ser Ser Gly Ser Ser Asn Thr
50 55 60
Ser Thr Ala Asn Arg Ser Thr His Asn Glu Leu Glu Lys Asn Arg Leu
65 70 75 80
Lys Asn Trp Leu Val Gly Arg Arg Asp Thr Arg Gly Met Lys Met Leu
85 90 95
Leu Lys Ala Ile Ala Val Ile
100

<210> 58
<211> 234
<212> PRT
<213> Homo sapiens

<400> 58
Met Glu Lys His Ile Asn Thr Phe Leu Gln Asn Val Gln Ile Leu Leu
1 5 10 15
Glu Ala Ala Ser Tyr Leu Glu Gln Ile Glu Lys Glu Asn Lys Lys Cys
20 25 30
Glu His Gly Tyr Ala Ser Ser Phe Pro Ser Met Pro Ser Pro Arg Leu
35 40 45
Gln His Ser Lys Pro Pro Arg Arg Leu Ser Arg Ala Gln Lys His Ser
50 55 60
Ser Gly Ser Ser Asn Thr Ser Thr Ala Asn Arg Ser Thr His Asn Glu

65		70		75		80									
Leu	Glu	Lys	Asn	Arg	Arg	Ala	His	Leu	Arg	Leu	Cys	Leu	Glu	Arg	Leu
				85					90					95	
Lys	Val	Leu	Ile	Pro	Leu	Gly	Pro	Asp	Cys	Thr	Arg	His	Thr	Thr	Leu
			100					105					110		
Gly	Leu	Leu	Asn	Lys	Ala	Lys	Ala	His	Ile	Lys	Lys	Leu	Glu	Glu	Ala
			115				120						125		
Glu	Arg	Lys	Ser	Gln	His	Gln	Leu	Glu	Asn	Leu	Glu	Arg	Glu	Gln	Arg
			130				135					140			
Phe	Leu	Lys	Trp	Arg	Leu	Glu	Gln	Leu	Gln	Gly	Pro	Gln	Glu	Met	Glu
145					150					155					160
Arg	Ile	Arg	Met	Asp	Ser	Ile	Gly	Ser	Thr	Ile	Ser	Ser	Asp	Arg	Ser
				165					170					175	
Asp	Ser	Glu	Arg	Glu	Glu	Ile	Glu	Val	Asp	Val	Glu	Ser	Thr	Glu	Phe
			180					185					190		
Ser	His	Gly	Glu	Val	Asp	Asn	Ile	Ser	Thr	Thr	Ser	Ile	Ser	Asp	Ile
			195				200					205			
Asp	Asp	His	Ser	Ser	Leu	Pro	Ser	Ile	Gly	Ser	Asp	Glu	Gly	Tyr	Ser
			210				215				220				
Ser	Ala	Ser	Val	Lys	Leu	Ser	Phe	Thr	Ser						
225					230										

<210> 59
 <211> 329
 <212> PRT
 <213> Homo sapiens

<400> 59
Met Glu Ser Pro Ala Ser Ser Gln Pro Ala Ser Met Pro Gln Ser Lys
1 5 10 15
Gly Lys Ser Lys Arg Lys Lys Asp Leu Arg Ile Ser Cys Met Ser Lys
20 25 30
Pro Pro Ala Pro Asn Pro Thr Pro Pro Arg Asn Leu Asp Ser Arg Thr
35 40 45
Phe Ile Thr Ile Gly Asp Arg Asn Phe Glu Val Glu Ala Asp Asp Leu
50 55 60
Val Thr Ile Ser Glu Leu Gly Arg Gly Ala Tyr Gly Val Val Glu Lys
65 70 75 80
Val Arg His Ala Gln Ser Gly Thr Ile Met Ala Val Lys Arg Ile Arg
85 90 95

Ala Thr Val Asn Ser Gln Glu Gln Lys Arg Leu Leu Met Asp Leu Asp
 100 105 110
 Ile Asn Met Arg Thr Val Asp Cys Phe Tyr Thr Val Thr Phe Tyr Gly
 115 120 125
 Ala Leu Phe Arg Glu Gly Asp Val Trp Ile Cys Met Glu Leu Met Asp
 130 135 140
 Thr Ser Leu Asp Lys Phe Tyr Arg Lys Val Leu Asp Lys Asn Met Thr
 145 150 155 160
 Ile Pro Glu Asp Ile Leu Gly Glu Ile Ala Val Ser Ile Val Arg Ala
 165 170 175
 Leu Glu His Leu His Ser Lys Leu Ser Val Ile His Arg Asp Val Lys
 180 185 190
 Pro Ser Asn Val Leu Ile Asn Lys Glu Gly His Val Lys Met Cys Asp
 195 200 205
 Phe Gly Ile Ser Gly Tyr Leu Val Asp Ser Val Ala Lys Thr Met Asp
 210 215 220
 Ala Gly Cys Lys Pro Tyr Met Ala Pro Glu Arg Ile Asn Pro Glu Leu
 225 230 235 240
 Asn Gln Lys Gly Tyr Asn Val Lys Ser Asp Val Trp Ser Leu Gly Ile
 245 250 255
 Thr Met Ile Glu Met Ala Ile Leu Arg Phe Pro Tyr Glu Ser Trp Gly
 260 265 270
 Thr Pro Phe Gln Gln Leu Lys Gln Val Val Glu Glu Pro Ser Pro Gln
 275 280 285
 Leu Pro Ala Asp Arg Phe Ser Pro Glu Phe Val Asp Phe Thr Ala Gln
 290 295 300
 Cys Leu Arg Lys Asn Pro Ala Glu Arg Met Ser Tyr Leu Glu Leu Ile
 305 310 315 320
 Gly Ala Asp Arg Phe Ser Pro Thr Pro
 325

<210> 60
 <211> 292
 <212> PRT
 <213> Homo sapiens

<400> 60
 Met Pro Glu Ile Arg Leu Arg His Val Val Ser Cys Ser Ser Gln Asp
 1 5 10 15

Ser Thr His Cys Ala Glu Asn Leu Leu Lys Ala Asp Thr Tyr Arg Lys
 20 25 30
 Trp Arg Ala Ala Lys Ala Gly Glu Lys Thr Ile Ser Val Val Leu Gln
 35 40 45
 Leu Glu Lys Glu Glu Gln Ile His Ser Val Asp Ile Gly Asn Asp Gly
 50 55 60
 Ser Ala Phe Val Glu Val Leu Val Gly Ser Ser Ala Gly Gly Ala Gly
 65 70 75 80
 Glu Gln Asp Tyr Glu Val Leu Leu Val Thr Ser Ser Phe Met Ser Pro
 85 90 95
 Ser Glu Ser Arg Ser Gly Ser Asn Pro Asn Arg Val Arg Met Phe Gly
 100 105 110
 Pro Asp Lys Leu Val Arg Ala Ala Ala Glu Lys Arg Trp Asp Arg Val
 115 120 125
 Lys Ile Val Cys Ser Gln Pro Tyr Ser Lys Asp Ser Pro Phe Gly Leu
 130 135 140
 Ser Phe Val Arg Phe His Ser Pro Pro Asp Lys Asp Glu Ala Glu Ala
 145 150 155 160
 Pro Ser Gln Lys Val Thr Val Thr Lys Leu Gly Gln Phe Arg Val Lys
 165 170 175
 Glu Glu Asp Glu Ser Ala Asn Ser Leu Arg Pro Gly Ala Leu Phe Phe
 180 185 190
 Ser Arg Ile Asn Lys Thr Ser Pro Val Thr Ala Ser Asp Pro Ala Gly
 195 200 205
 Pro Ser Tyr Ala Ala Ala Thr Leu Gln Ala Ser Ser Ala Ala Ser Ser
 210 215 220
 Ala Ser Pro Val Ser Arg Ala Ile Gly Ser Thr Ser Lys Pro Gln Glu
 225 230 235 240
 Ser Pro Trp His Ser Phe Val Pro Asp Gly Ser Thr Val Ala Met Arg
 245 250 255
 Ser Arg Ser Tyr Phe Leu Thr Ser Ser Met Gly Trp Cys Arg Lys Pro
 260 265 270
 Glu Val Cys Ala Ile His Thr His Thr His Thr His Thr His Thr His
 275 280 285
 Thr Arg Cys Ile
 290

<210> 61

<211> 266
 <212> PRT
 <213> Homo sapiens

<400> 61

Met	Pro	Glu	Ile	Arg	Leu	Arg	His	Val	Val	Ser	Cys	Ser	Ser	Gln	Asp	1	5	10	15
Ser	Thr	His	Cys	Ala	Glu	Asn	Leu	Leu	Lys	Ala	Asp	Thr	Tyr	Arg	Lys	20	25	30	
Trp	Arg	Ala	Ala	Lys	Ala	Gly	Glu	Lys	Thr	Ile	Ser	Val	Val	Leu	Gln	35	40	45	
Leu	Glu	Lys	Glu	Glu	Gln	Ile	His	Ser	Val	Asp	Ile	Gly	Asn	Asp	Gly	50	55	60	
Ser	Ala	Phe	Val	Glu	Val	Leu	Val	Gly	Ser	Ser	Ala	Gly	Gly	Ala	Gly	65	70	75	80
Glu	Gln	Asp	Tyr	Glu	Val	Leu	Leu	Val	Thr	Ser	Ser	Phe	Met	Ser	Pro	85	90	95	
Ser	Glu	Ser	Arg	Ser	Gly	Ser	Asn	Pro	Asn	Arg	Val	Arg	Met	Phe	Gly	100	105	110	
Pro	Asp	Lys	Leu	Val	Arg	Ala	Ala	Ala	Glu	Lys	Arg	Trp	Asp	Arg	Val	115	120	125	
Lys	Ile	Val	Cys	Ser	Gln	Pro	Tyr	Ser	Lys	Asp	Ser	Pro	Phe	Gly	Leu	130	135	140	
Ser	Phe	Val	Arg	Phe	His	Ser	Pro	Pro	Asp	Lys	Asp	Glu	Ala	Glu	Ala	145	150	155	160
Pro	Ser	Gln	Lys	Val	Thr	Val	Thr	Lys	Leu	Gly	Gln	Phe	Arg	Val	Lys	165	170	175	
Glu	Glu	Asp	Glu	Ser	Ala	Asn	Ser	Leu	Arg	Pro	Gly	Ala	Leu	Phe	Phe	180	185	190	
Ser	Arg	Ile	Asn	Lys	Thr	Ser	Pro	Val	Thr	Ala	Ser	Asp	Pro	Ala	Gly	195	200	205	
Pro	Ser	Tyr	Ala	Ala	Ala	Thr	Leu	Gln	Ala	Ser	Ser	Ala	Ala	Ser	Ser	210	215	220	
Ala	Ser	Pro	Val	Ser	Arg	Ala	Ile	Gly	Ser	Thr	Ser	Lys	Pro	Gln	Glu	225	230	235	240
Ser	Ser	Asp	Phe	Gly	Gly	Val	Glu	Glu	Glu	Arg	Ser	Trp	Arg	Pro	Gln	245	250	255	
Ser	Ile	Pro	Ile	Pro	Ser	Ala	Pro	Gly	Ser	260	265								

<210> 62
 <211> 247
 <212> PRT
 <213> Homo sapiens

<400> 62
 Met Pro Glu Ile Arg Leu Arg His Val Val Ser Cys Ser Ser Gln Asp
 1 5 10 15
 Ser Thr His Cys Ala Glu Asn Leu Leu Lys Ala Asp Thr Tyr Arg Lys
 20 25 30
 Trp Arg Ala Ala Lys Ala Gly Glu Lys Thr Ile Ser Val Val Leu Gln
 35 40 45
 Leu Glu Lys Glu Glu Gln Ile His Ser Val Asp Ile Gly Asn Asp Gly
 50 55 60
 Ser Ala Phe Val Glu Val Leu Val Gly Ser Ser Ala Gly Gly Ala Gly
 65 70 75 80
 Glu Gln Asp Tyr Glu Val Leu Leu Val Thr Ser Ser Phe Met Ser Pro
 85 90 95
 Ser Glu Ser Arg Ser Gly Ser Asn Pro Asn Arg Val Arg Met Phe Gly
 100 105 110
 Pro Asp Lys Leu Val Arg Ala Ala Ala Glu Lys Arg Trp Asp Arg Val
 115 120 125
 Lys Ile Val Cys Ser Gln Pro Tyr Ser Lys Asp Ser Pro Phe Gly Leu
 130 135 140
 Ser Phe Val Arg Phe His Ser Pro Pro Asp Lys Asp Glu Ala Glu Ala
 145 150 155 160
 Pro Ser Gln Lys Val Thr Val Thr Lys Leu Gly Gln Phe Arg Val Lys
 165 170 175
 Glu Glu Asp Glu Ser Ala Asn Ser Leu Arg Leu Glu Asp Tyr Met Ser
 180 185 190
 Asp Arg Val Gln Phe Val Ile Thr Ala Gln Glu Trp Asp Pro Ser Phe
 195 200 205
 Glu Glu Ala Leu Met Asp Asn Pro Ser Leu Ala Phe Val Arg Pro Arg
 210 215 220
 Trp Ile Tyr Ser Cys Asn Glu Lys Gln Lys Leu Leu Pro His Gln Leu
 225 230 235 240
 Tyr Gly Val Val Pro Gln Ala
 245

<210> 63
 <211> 624
 <212> PRT
 <213> Homo sapiens

<400> 63

Met	Pro	Glu	Ile	Arg	Leu	Arg	His	Val	Val	Ser	Cys	Ser	Ser	Gln	Asp	1	5	10	15
Ser	Thr	His	Cys	Ala	Glu	Asn	Leu	Leu	Lys	Ala	Asp	Thr	Tyr	Arg	Lys	20	25	30	
Trp	Arg	Ala	Ala	Lys	Ala	Gly	Glu	Lys	Thr	Ile	Ser	Val	Val	Leu	Gln	35	40	45	
Leu	Glu	Lys	Glu	Glu	Gln	Ile	His	Ser	Val	Asp	Ile	Gly	Asn	Asp	Gly	50	55	60	
Ser	Ala	Phe	Val	Glu	Val	Leu	Val	Gly	Ser	Ser	Ala	Gly	Gly	Ala	Gly	65	70	75	80
Glu	Gln	Asp	Tyr	Glu	Val	Leu	Leu	Val	Thr	Ser	Ser	Phe	Met	Ser	Pro	85	90	95	
Ser	Glu	Ser	Arg	Ser	Gly	Ser	Asn	Pro	Asn	Arg	Val	Arg	Met	Phe	Gly	100	105	110	
Pro	Asp	Lys	Leu	Val	Arg	Ala	Ala	Ala	Glu	Lys	Arg	Trp	Asp	Arg	Val	115	120	125	
Lys	Ile	Val	Cys	Ser	Gln	Pro	Tyr	Ser	Lys	Asp	Ser	Pro	Phe	Gly	Leu	130	135	140	
Ser	Phe	Val	Arg	Phe	His	Ser	Pro	Pro	Asp	Lys	Asp	Glu	Ala	Glu	Ala	145	150	155	160
Pro	Ser	Gln	Lys	Val	Thr	Val	Thr	Lys	Leu	Gly	Gln	Phe	Arg	Val	Lys	165	170	175	
Glu	Glu	Asp	Glu	Ser	Ala	Asn	Ser	Leu	Arg	Pro	Gly	Ala	Leu	Phe	Phe	180	185	190	
Ser	Arg	Ile	Asn	Lys	Thr	Ser	Pro	Val	Thr	Ala	Ser	Asp	Pro	Ala	Gly	195	200	205	
Pro	Ser	Tyr	Ala	Ala	Ala	Thr	Leu	Gln	Ala	Ser	Ser	Ala	Ala	Ser	Ser	210	215	220	
Ala	Ser	Pro	Val	Ser	Arg	Ala	Ile	Gly	Ser	Thr	Ser	Lys	Pro	Gln	Glu	225	230	235	240
Ser	Pro	Lys	Gly	Lys	Arg	Lys	Leu	Asp	Leu	Asn	Gln	Glu	Glu	Lys	Lys	245	250	255	
Thr	Pro	Ser	Lys	Pro	Pro	Ala	Gln	Leu	Ser	Pro	Ser	Val	Pro	Lys	Arg	260	265	270	

Pro Lys Leu Pro Ala Pro Thr Arg Thr Pro Ala Thr Ala Pro Val Pro
 275 280 285
 Ala Arg Ala Gln Gly Ala Val Thr Gly Lys Pro Arg Gly Glu Gly Thr
 290 295 300
 Glu Pro Arg Arg Pro Arg Ala Gly Pro Glu Glu Leu Gly Lys Ile Leu
 305 310 315 320
 Gln Gly Val Val Val Val Leu Ser Gly Phe Gln Asn Pro Phe Arg Ser
 325 330 335
 Glu Leu Arg Asp Lys Ala Leu Glu Leu Gly Ala Lys Tyr Arg Pro Asp
 340 345 350
 Trp Thr Arg Asp Ser Thr His Leu Ile Cys Ala Phe Ala Asn Thr Pro
 355 360 365
 Lys Tyr Ser Gln Val Leu Gly Leu Gly Gly Arg Ile Val Arg Lys Glu
 370 375 380
 Trp Val Leu Asp Cys His Arg Met Arg Arg Arg Leu Pro Ser Arg Arg
 385 390 395 400
 Tyr Leu Met Ala Gly Pro Gly Ser Ser Ser Glu Glu Asp Glu Ala Ser
 405 410 415
 His Ser Gly Gly Ser Gly Asp Glu Ala Pro Lys Leu Pro Gln Lys Gln
 420 425 430
 Pro Gln Thr Lys Thr Lys Pro Thr Gln Ala Ala Gly Pro Ser Ser Pro
 435 440 445
 Gln Lys Pro Pro Thr Pro Glu Glu Thr Lys Ala Ala Ser Pro Val Leu
 450 455 460
 Gln Glu Asp Ile Asp Ile Glu Gly Val Gln Ser Glu Gly Gln Asp Asn
 465 470 475 480
 Gly Ala Glu Asp Ser Gly Asp Thr Glu Asp Glu Leu Arg Arg Val Ala
 485 490 495
 Glu Gln Lys Glu His Arg Leu Pro Pro Gly Gln Glu Glu Asn Gly Glu
 500 505 510
 Asp Pro Tyr Ala Gly Ser Thr Asp Glu Asn Thr Asp Ser Glu Glu His
 515 520 525
 Gln Glu Pro Pro Asp Leu Pro Val Pro Glu Leu Pro Arg Phe Leu Pro
 530 535 540
 Gly Gln Ala Leu Leu Ser Leu Arg Gly Val Pro Trp Gly Arg Ala Ala
 545 550 555 560
 Glu Thr His Pro Ile Arg His Ser Leu Gln Trp Gly Ala Pro Trp His
 565 570 575

Ser Phe Val Pro Asp Gly Ser Thr Val Ala Met Arg Ser Arg Ser Tyr
580 585 590

Phe Leu Thr Ser Ser Met Gly Trp Cys Arg Lys Pro Glu Val Cys Ala
595 600 605

Ile His Thr His Thr His Thr His Thr His Thr Arg Cys Ile
610 615 620

<210> 64

<211> 567

<212> PRT

<213> Homo sapiens

<400> 64

Met Ala Gly Ala Ile Ala Ser Arg Met Ser Phe Ser Ser Leu Lys Arg
1 5 10 15

Lys Gln Pro Lys Thr Phe Thr Val Arg Ile Val Thr Met Asp Ala Glu
20 25 30

Met Glu Phe Asn Cys Glu Met Lys Trp Lys Gly Lys Asp Leu Phe Asp
35 40 45

Leu Val Cys Arg Thr Leu Gly Leu Arg Glu Thr Trp Phe Phe Gly Leu
50 55 60

Gln Tyr Thr Ile Lys Asp Thr Val Ala Trp Leu Lys Met Asp Lys Lys
65 70 75 80

Val Leu Asp His Asp Val Ser Lys Glu Glu Pro Val Thr Phe His Phe
85 90 95

Leu Ala Lys Phe Tyr Pro Glu Asn Ala Glu Glu Glu Leu Val Gln Glu
100 105 110

Ile Thr Gln His Leu Phe Phe Leu Gln Val Lys Lys Gln Ile Leu Asp
115 120 125

Glu Lys Ile Tyr Cys Pro Pro Glu Ala Ser Val Leu Leu Ala Ser Tyr
130 135 140

Ala Val Gln Ala Lys Tyr Gly Asp Tyr Asp Pro Ser Val His Lys Arg
145 150 155 160

Gly Phe Leu Ala Gln Glu Glu Leu Leu Pro Lys Arg Val Ile Asn Leu
165 170 175

Tyr Gln Met Thr Pro Glu Met Trp Glu Glu Arg Ile Thr Ala Trp Tyr
180 185 190

Ala Glu His Arg Gly Arg Ala Arg Asp Glu Ala Glu Met Glu Tyr Leu

195					200					205					
Lys	Ile	Ala	Gln	Asp	Leu	Glu	Met	Tyr	Gly	Val	Asn	Tyr	Phe	Ala	Ile
210					215					220					
Arg	Asn	Lys	Lys	Gly	Thr	Glu	Leu	Leu	Leu	Gly	Val	Asp	Ala	Leu	Gly
225					230					235					240
Leu	His	Ile	Tyr	Asp	Pro	Glu	Asn	Arg	Leu	Thr	Pro	Lys	Ile	Ser	Phe
				245					250					255	
Pro	Trp	Lys	Asn	Glu	Ile	Arg	Asn	Ile	Ser	Tyr	Ser	Asp	Lys	Glu	Phe
			260					265					270		
Thr	Ile	Lys	Pro	Leu	Asp	Lys	Lys	Ile	Asp	Val	Phe	Lys	Phe	Asn	Ser
		275					280					285			
Ser	Lys	Leu	Arg	Val	Asn	Lys	Leu	Ile	Leu	Gln	Leu	Cys	Ile	Gly	Asn
	290					295					300				
His	Asp	Leu	Phe	Met	Arg	Arg	Arg	Lys	Ala	Asp	Ser	Leu	Glu	Val	Gln
305					310					315					320
Gln	Met	Lys	Ala	Gln	Ala	Arg	Glu	Glu	Lys	Ala	Arg	Lys	Gln	Met	Lys
			325						330					335	
Glu	Glu	Ala	Thr	Met	Ala	Asn	Glu	Ala	Leu	Met	Arg	Ser	Glu	Glu	Thr
		340						345					350		
Ala	Asp	Leu	Leu	Ala	Glu	Lys	Ala	Gln	Ile	Thr	Glu	Glu	Glu	Ala	Lys
	355						360					365			
Leu	Leu	Ala	Gln	Lys	Ala	Ala	Glu	Ala	Glu	Gln	Glu	Met	Gln	Arg	Ile
	370					375					380				
Lys	Ala	Thr	Ala	Ile	Arg	Thr	Glu	Glu	Glu	Lys	Arg	Leu	Met	Glu	Gln
385					390					395					400
Lys	Val	Leu	Glu	Ala	Glu	Val	Leu	Ala	Leu	Lys	Met	Ala	Glu	Glu	Ser
			405					410					415		
Glu	Arg	Arg	Ala	Lys	Glu	Ala	Asp	Gln	Leu	Lys	Gln	Asp	Leu	Gln	Glu
			420					425					430		
Ala	Arg	Glu	Ala	Glu	Arg	Arg	Ala	Lys	Gln	Lys	Leu	Leu	Glu	Ile	Ala
		435					440					445			
Thr	Lys	Pro	Thr	Tyr	Pro	Pro	Met	Asn	Pro	Ile	Pro	Ala	Pro	Leu	Pro
	450						455					460			
Pro	Asp	Ile	Pro	Ser	Phe	Asn	Leu	Ile	Gly	Asp	Ser	Leu	Ser	Phe	Asp
465					470					475					480
Phe	Lys	Asp	Thr	Asp	Met	Lys	Arg	Leu	Ser	Met	Glu	Ile	Glu	Lys	Glu
			485						490				495		
Lys	Val	Glu	Tyr	Met	Glu	Lys	Ser	Lys	His	Leu	Gln	Glu	Gln	Leu	Asn

500	505	510
Glu Leu Lys Thr Glu Ile Glu Ala Leu Lys Leu Lys Glu Arg Glu Thr		
515	520	525
Ala Leu Asp Ile Leu His Asn Glu Asn Ser Asp Arg Gly Gly Ser Ser		
530	535	540
Lys His Asn Thr Ile Lys Lys Leu Thr Leu Gln Ser Ala Lys Ser Arg		
545	550	555
		560
Val Ala Phe Phe Glu Glu Leu		
565		

<210> 65
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 65
Met Arg Glu Arg Phe Asp Arg Phe Leu His Glu Lys Asn Cys Met Thr
1 5 10 15
Asp Leu Leu Ala Lys Leu Glu Ala Lys Thr Gly Val Asn Arg Ser Phe
20 25 30
Ile Ala Leu Gly Val Ile Gly Leu Val Ala Leu Tyr Leu Val Phe Gly
35 40 45
Tyr Gly Ala Ser Leu Leu Cys Asn Leu Ile Gly Phe Gly Tyr Pro Ala
50 55 60
Tyr Ile Ser Ile Lys Ala Ile Glu Ser Pro Asn Lys Glu Asp Asp Thr
65 70 75 80
Gln Trp Leu Thr Tyr Trp Val Val Tyr Gly Val Phe Ser Ile Ala Glu
85 90 95
Phe Phe Ser Asp Ile Phe Leu Ser Trp Phe Pro Phe Tyr Tyr Met Leu
100 105 110
Lys Gln Ile Tyr Leu Glu Pro Pro Cys Ala Arg Phe Cys Ser Thr Ser
115 120 125
Gly Arg Tyr Phe Gly Glu
130

<210> 66
 <211> 1278
 <212> PRT
 <213> Homo sapiens

<400> 66

Met	Asp	Leu	Glu	Gly	Asp	Arg	Asn	Gly	Gly	Ala	Lys	Lys	Lys	Asn	Phe	1	5	10	15
Phe	Lys	Leu	Asn	Asn	Lys	Ser	Glu	Lys	Asp	Lys	Lys	Glu	Lys	Lys	Pro	20	25	30	
Thr	Val	Ser	Val	Phe	Ser	Met	Phe	Arg	Tyr	Ser	Asn	Trp	Leu	Asp	Lys	35	40	45	
Leu	Tyr	Met	Val	Val	Gly	Thr	Leu	Ala	Ala	Ile	Ile	His	Gly	Ala	Gly	50	55	60	
Leu	Pro	Leu	Met	Met	Leu	Val	Phe	Gly	Glu	Met	Thr	Asp	Ile	Phe	Ala	65	70	75	80
Asn	Ala	Gly	Asn	Leu	Glu	Asp	Leu	Met	Ser	Asn	Ile	Thr	Asn	Arg	Ser	85	90	95	
Asp	Ile	Asn	Asp	Thr	Gly	Phe	Phe	Met	Asn	Leu	Glu	Glu	Asp	Met	Thr	100	105	110	
Arg	Tyr	Ala	Tyr	Tyr	Tyr	Ser	Gly	Ile	Gly	Ala	Gly	Val	Leu	Val	Ala	115	120	125	
Ala	Tyr	Ile	Gln	Val	Ser	Phe	Trp	Cys	Leu	Ala	Ala	Gly	Arg	Gln	Ile	130	135	140	
His	Lys	Ile	Arg	Lys	Gln	Phe	Phe	His	Ala	Ile	Met	Arg	Gln	Glu	Ile	145	150	155	160
Gly	Trp	Phe	Asp	Val	His	Asp	Val	Gly	Glu	Leu	Asn	Thr	Arg	Leu	Thr	165	170	175	
Asp	Asp	Val	Ser	Lys	Ile	Asn	Glu	Val	Ile	Gly	Asp	Lys	Ile	Gly	Met	180	185	190	
Phe	Phe	Gln	Ser	Met	Ala	Thr	Phe	Phe	Thr	Gly	Phe	Ile	Val	Gly	Phe	195	200	205	
Thr	Arg	Gly	Trp	Lys	Leu	Thr	Leu	Val	Ile	Leu	Ala	Ile	Ser	Pro	Val	210	215	220	
Leu	Gly	Leu	Ser	Ala	Ala	Val	Trp	Ala	Lys	Ile	Leu	Ser	Ser	Phe	Thr	225	230	235	240
Asp	Lys	Glu	Leu	Leu	Ala	Tyr	Ala	Lys	Ala	Gly	Ala	Val	Ala	Glu	Glu	245	250	255	
Val	Leu	Ala	Ala	Ile	Arg	Thr	Val	Ile	Ala	Phe	Gly	Gly	Gln	Lys	Lys	260	265	270	
Glu	Leu	Glu	Arg	Tyr	Asn	Lys	Asn	Leu	Glu	Glu	Ala	Lys	Arg	Ile	Gly	275	280	285	
Ile	Lys	Lys	Ala	Ile	Thr	Ala	Asn	Ile	Ser	Ile	Gly	Ala	Ala	Phe	Leu	290	295	300	

Leu Ile Tyr Ala Ser Tyr Ala Leu Ala Phe Trp Tyr Gly Thr Thr Leu
 305 310 315 320
 Val Leu Ser Gly Glu Tyr Ser Ile Gly Gln Val Leu Thr Val Phe Phe
 325 330 335
 Ser Val Leu Ile Gly Ala Phe Ser Val Gly Gln Ala Ser Pro Ser Ile
 340 345 350
 Glu Ala Phe Ala Asn Ala Arg Gly Ala Ala Tyr Glu Ile Phe Lys Ile
 355 360 365
 Ile Asp Asn Lys Pro Ser Ile Asp Ser Tyr Ser Lys Ser Gly His Lys
 370 375 380
 Pro Asp Asn Ile Lys Gly Asn Leu Glu Phe Arg Asn Val His Phe Ser
 385 390 395 400
 Tyr Pro Ser Arg Lys Glu Val Lys Ile Leu Lys Gly Leu Asn Leu Lys
 405 410 415
 Val Gln Ser Gly Gln Thr Val Ala Leu Val Gly Asn Ser Gly Cys Gly
 420 425 430
 Lys Ser Thr Thr Val Gln Leu Met Gln Arg Leu Tyr Asp Pro Thr Glu
 435 440 445
 Gly Met Val Ser Val Asp Gly Gln Asp Ile Arg Thr Ile Asn Val Arg
 450 455 460
 Phe Leu Arg Glu Ile Ile Gly Val Val Ser Gln Glu Pro Val Leu Phe
 465 470 475 480
 Ala Thr Thr Ile Ala Glu Asn Ile Arg Tyr Gly Arg Glu Asn Val Thr
 485 490 495
 Met Asp Glu Ile Glu Lys Ala Val Lys Glu Ala Asn Ala Tyr Asp Phe
 500 505 510
 Ile Met Lys Leu Pro His Lys Phe Asp Thr Leu Val Gly Glu Arg Gly
 515 520 525
 Ala Gln Leu Ser Gly Gly Gln Lys Gln Arg Ile Ala Ile Ala Arg Ala
 530 535 540
 Leu Val Arg Asn Pro Lys Ile Leu Leu Leu Asp Glu Ala Thr Ser Ala
 545 550 555 560
 Leu Asp Thr Glu Ser Glu Ala Val Val Gln Val Ala Leu Asp Lys Ala
 565 570 575
 Arg Lys Gly Arg Thr Thr Ile Val Ile Ala His Arg Leu Ser Thr Val
 580 585 590
 Arg Asn Ala Asp Val Ile Ala Gly Phe Asp Asp Gly Val Ile Val Glu
 595 600 605

Lys Gly Asn His Asp Glu Leu Met Lys Glu Lys Gly Ile Tyr Phe Lys
 610 615 620
 Leu Val Thr Met Gln Thr Ala Gly Asn Glu Val Glu Leu Glu Asn Ala
 625 630 635 640
 Ala Asp Glu Ser Lys Ser Glu Ile Asp Ala Leu Glu Met Ser Ser Asn
 645 650 655
 Asp Ser Arg Ser Ser Leu Ile Arg Lys Arg Ser Thr Arg Arg Ser Val
 660 665 670
 Arg Gly Ser Gln Ala Gln Asp Arg Lys Leu Ser Thr Lys Glu Ala Leu
 675 680 685
 Asp Glu Ser Ile Pro Pro Val Ser Phe Trp Arg Ile Met Lys Leu Asn
 690 695 700
 Leu Thr Glu Trp Pro Tyr Phe Val Val Gly Val Phe Cys Ala Ile Ile
 705 710 715 720
 Asn Gly Gly Leu Gln Pro Ala Phe Ala Ile Ile Phe Ser Lys Ile Ile
 725 730 735
 Gly Val Phe Thr Arg Ile Asp Asp Pro Glu Thr Lys Arg Gln Asn Ser
 740 745 750
 Asn Leu Phe Ser Leu Leu Phe Leu Ala Leu Gly Ile Ile Ser Phe Ile
 755 760 765
 Thr Phe Phe Leu Gln Gly Phe Thr Phe Gly Lys Ala Gly Glu Ile Leu
 770 775 780
 Thr Lys Arg Leu Arg Tyr Met Val Phe Arg Ser Met Leu Arg Gln Asp
 785 790 795 800
 Val Ser Trp Phe Asp Asp Pro Lys Asn Thr Thr Gly Ala Leu Thr Thr
 805 810 815
 Arg Leu Ala Asn Asp Ala Ala Gln Val Lys Gly Ala Ile Gly Ser Arg
 820 825 830
 Leu Ala Val Ile Thr Gln Asn Ile Ala Asn Leu Gly Thr Gly Ile Ile
 835 840 845
 Ile Ser Phe Ile Tyr Gly Trp Gln Leu Thr Leu Leu Leu Leu Ala Ile
 850 855 860
 Val Pro Ile Ile Ala Ile Ala Gly Val Val Glu Met Lys Met Leu Ser
 865 870 875 880
 Gly Gln Ala Leu Lys Asp Lys Lys Glu Leu Glu Gly Ala Gly Lys Ile
 885 890 895
 Ala Thr Glu Ala Ile Glu Asn Phe Arg Thr Val Val Ser Leu Thr Gln
 900 905 910

Glu Gln Lys Phe Glu His Met Tyr Ala Gln Ser Leu Gln Val Pro Tyr
 915 920 925
 Arg Asn Ser Leu Arg Lys Ala His Ile Phe Gly Ile Thr Phe Ser Phe
 930 935 940
 Thr Gln Ala Met Met Tyr Phe Ser Tyr Ala Gly Cys Phe Arg Phe Gly
 945 950 955 960
 Ala Tyr Leu Val Ala His Lys Leu Met Ser Phe Glu Asp Val Leu Leu
 965 970 975
 Val Phe Ser Ala Val Val Phe Gly Ala Met Ala Val Gly Gln Val Ser
 980 985 990
 Ser Phe Ala Pro Asp Tyr Ala Lys Ala Lys Ile Ser Ala Ala His Ile
 995 1000 1005
 Ile Met Ile Ile Glu Lys Thr Pro Leu Ile Asp Ser Tyr Ser Thr Glu
 1010 1015 1020
 Gly Leu Met Pro Asn Thr Leu Glu Gly Asn Val Thr Phe Gly Glu Val
 1025 1030 1035 1040
 Val Phe Asn Tyr Pro Thr Arg Pro Asp Ile Pro Val Leu Gln Gly Leu
 1045 1050 1055
 Ser Leu Glu Val Lys Lys Gly Gln Thr Leu Ala Leu Val Gly Ser Ser
 1060 1065 1070
 Gly Cys Gly Lys Ser Thr Val Val Gln Leu Leu Glu Arg Phe Tyr Asp
 1075 1080 1085
 Pro Leu Ala Gly Lys Val Leu Leu Asp Gly Lys Glu Ile Lys Arg Leu
 1090 1095 1100
 Asn Val Gln Trp Leu Arg Ala His Leu Gly Ile Val Ser Gln Glu Pro
 1105 1110 1115 1120
 Ile Leu Phe Asp Cys Ser Ile Ala Glu Asn Ile Ala Tyr Gly Asp Asn
 1125 1130 1135
 Ser Arg Val Val Ser Gln Glu Glu Ile Val Arg Ala Ala Lys Glu Ala
 1140 1145 1150
 Asn Ile His Ala Phe Ile Glu Ser Leu Pro Asn Lys Tyr Ser Thr Lys
 1155 1160 1165
 Val Gly Asp Lys Gly Thr Gln Leu Ser Gly Gly Gln Lys Gln Arg Ile
 1170 1175 1180
 Ala Ile Ala Arg Ala Leu Val Arg Gln Pro His Ile Leu Leu Leu Asp
 1185 1190 1195 1200
 Glu Ala Thr Ser Ala Leu Asp Thr Glu Ser Glu Lys Val Val Gln Glu
 1205 1210 1215

Ala Leu Asp Lys Ala Arg Glu Gly Arg Thr Cys Ile Val Ile Ala His
1220 1225 1230

Arg Leu Ser Thr Ile Gln Asn Ala Asp Leu Ile Val Val Phe Gln Asn
1235 1240 1245

Gly Arg Val Lys Glu His Gly Thr His Gln Gln Leu Leu Ala Gln Lys
1250 1255 1260

Gly Ile Tyr Phe Ser Met Val Ser Val Gln Ala Gly Thr Ile
1265 1270 1275

<210> 67
<211> 579
<212> PRT
<213> Homo sapiens

<400> 67
Met Asp Leu Glu Gly Asp Arg Asn Gly Gly Ala Lys Lys Lys Asn Phe
1 5 10 15

Phe Lys Leu Asn Asn Lys Ser Glu Lys Asp Lys Lys Glu Lys Lys Pro
20 25 30

Thr Val Ser Val Phe Ser Met Phe Arg Tyr Ser Asn Trp Leu Asp Lys
35 40 45

Leu Tyr Met Val Val Gly Thr Leu Ala Ala Ile Ile His Gly Ala Gly
50 55 60

Leu Pro Leu Met Met Leu Val Phe Gly Glu Met Thr Asp Ile Phe Ala
65 70 75 80

Asn Ala Gly Asn Leu Glu Asp Leu Met Ser Asn Ile Thr Asn Arg Ser
85 90 95

Asp Ile Asn Asp Thr Gly Phe Phe Met Asn Leu Glu Glu Asp Met Thr
100 105 110

Arg Tyr Ala Tyr Tyr Tyr Ser Gly Ile Gly Ala Gly Val Leu Val Ala
115 120 125

Ala Tyr Ile Gln Val Ser Phe Trp Cys Leu Ala Ala Gly Arg Gln Ile
130 135 140

His Lys Ile Arg Lys Gln Phe Phe His Ala Ile Met Arg Gln Glu Ile
145 150 155 160

Gly Trp Phe Asp Val His Asp Val Gly Glu Leu Asn Thr Arg Leu Thr
165 170 175

Asp Asp Val Ser Lys Ile Asn Glu Gly Ile Gly Asp Lys Ile Gly Met
180 185 190

Phe Phe Gln Ser Met Ala Thr Phe Phe Thr Gly Phe Ile Val Gly Phe

195						200					205				
Thr	Arg	Gly	Trp	Lys	Leu	Thr	Leu	Val	Ile	Leu	Ala	Ile	Ser	Pro	Val
210						215					220				
Leu	Gly	Leu	Ser	Ala	Ala	Val	Trp	Ala	Lys	Ile	Leu	Ser	Ser	Phe	Thr
225					230					235					240
Asp	Lys	Glu	Leu	Leu	Ala	Tyr	Ala	Lys	Ala	Gly	Ala	Val	Ala	Glu	Glu
				245					250					255	
Val	Leu	Ala	Ala	Ile	Arg	Thr	Val	Ile	Ala	Phe	Gly	Gly	Gln	Lys	Lys
			260					265					270		
Glu	Leu	Glu	Arg	Tyr	Asn	Lys	Asn	Leu	Glu	Glu	Ala	Lys	Arg	Ile	Gly
		275					280					285			
Ile	Lys	Lys	Ala	Ile	Thr	Ala	Asn	Ile	Ser	Ile	Gly	Ala	Ala	Phe	Leu
	290						295					300			
Leu	Ile	Tyr	Ala	Ser	Tyr	Ala	Leu	Ala	Phe	Trp	Tyr	Gly	Thr	Thr	Leu
305					310					315					320
Val	Leu	Ser	Gly	Glu	Tyr	Ser	Ile	Gly	Gln	Val	Leu	Thr	Val	Phe	Phe
			325						330					335	
Ser	Val	Leu	Ile	Gly	Ala	Phe	Ser	Val	Gly	Gln	Ala	Ser	Pro	Ser	Ile
			340					345					350		
Glu	Ala	Phe	Ala	Asn	Ala	Arg	Gly	Ala	Ala	Tyr	Glu	Ile	Phe	Lys	Ile
		355					360					365			
Ile	Asp	Asn	Lys	Pro	Ser	Ile	Asp	Ser	Tyr	Ser	Lys	Ser	Gly	His	Lys
	370						375					380			
Pro	Asp	Asn	Ile	Lys	Gly	Asn	Leu	Glu	Phe	Arg	Asn	Val	His	Phe	Ser
385					390					395					400
Tyr	Pro	Ser	Arg	Lys	Glu	Val	Lys	Ile	Leu	Lys	Gly	Leu	Asn	Leu	Lys
				405					410					415	
Val	Gln	Ser	Gly	Gln	Thr	Val	Ala	Leu	Val	Gly	Asn	Ser	Gly	Cys	Gly
			420					425					430		
Lys	Ser	Thr	Thr	Val	Gln	Leu	Met	Gln	Arg	Leu	Tyr	Asp	Pro	Thr	Glu
		435					440					445			
Gly	Met	Val	Ser	Val	Asp	Gly	Gln	Asp	Ile	Arg	Thr	Ile	Asn	Val	Arg
	450						455					460			
Phe	Leu	Arg	Glu	Ile	Ile	Gly	Val	Val	Ser	Gln	Glu	Pro	Val	Leu	Phe
465					470					475					480
Ala	Thr	Thr	Ile	Ala	Glu	Asn	Ile	Arg	Tyr	Gly	Arg	Glu	Asn	Val	Thr
				485					490					495	
Met	Asp	Glu	Ile	Glu	Lys	Ala	Val	Lys	Glu	Ala	Asn	Ala	Tyr	Asp	Phe

Gly Thr Ser Phe Met Met Thr Pro Tyr Val Val Thr Arg Tyr Tyr Arg
180 185 190

Ala Pro Glu Val Ile Leu Gly Met Gly Tyr Lys Glu Asn Gly Gly Arg
195 200 205

Met Gly Lys Gly Ile Phe Thr Arg Leu Gln
210 215

<210> 69
<211> 307
<212> PRT
<213> Homo sapiens

<400> 69
Met Ser Arg Ser Lys Arg Asp Asn Asn Phe Tyr Ser Val Glu Ile Gly
1 5 10 15

Asp Ser Thr Phe Thr Val Leu Lys Arg Tyr Gln Asn Leu Lys Pro Ile
20 25 30

Gly Ser Gly Ala Gln Gly Ile Val Cys Ala Ala Tyr Asp Ala Ile Leu
35 40 45

Glu Arg Asn Val Ala Ile Lys Lys Leu Ser Arg Pro Phe Gln Asn Gln
50 55 60

Thr His Ala Lys Arg Ala Tyr Arg Glu Leu Val Leu Met Lys Cys Val
65 70 75 80

Asn His Lys Asn Ile Ile Gly Leu Leu Asn Val Phe Thr Pro Gln Lys
85 90 95

Ser Leu Glu Glu Phe Gln Asp Val Tyr Ile Val Met Glu Leu Met Asp
100 105 110

Ala Asn Leu Cys Gln Val Ile Gln Met Glu Leu Asp His Glu Arg Met
115 120 125

Ser Tyr Leu Leu Tyr Gln Met Leu Cys Gly Ile Lys His Leu His Ser
130 135 140

Ala Gly Ile Ile His Arg Asp Leu Lys Pro Ser Asn Ile Val Val Lys
145 150 155 160

Ser Asp Cys Thr Leu Lys Ile Leu Asp Phe Gly Leu Ala Arg Thr Ala
165 170 175

Gly Thr Ser Phe Met Met Thr Pro Tyr Val Val Thr Arg Tyr Tyr Arg
180 185 190

Ala Pro Glu Val Ile Leu Gly Met Gly Tyr Lys Glu Asn Val Asp Leu
195 200 205

Trp Ser Val Gly Cys Ile Met Gly Glu Met Val Cys His Lys Ile Leu
 210 215 220
 Phe Pro Gly Arg Asp Tyr Ile Asp Gln Trp Asn Lys Val Ile Glu Gln
 225 230 235 240
 Leu Gly Thr Pro Cys Pro Glu Phe Met Lys Lys Leu Gln Pro Thr Val
 245 250 255
 Arg Thr Tyr Val Glu Asn Arg Pro Lys Tyr Ala Gly Tyr Ser Phe Glu
 260 265 270
 Lys Leu Phe Pro Asp Val Leu Phe Pro Ala Asp Ser Glu His Asn Lys
 275 280 285
 Leu Lys Ala Ser Gln Tyr Phe Leu Gln Ile Cys Thr Phe Asn Pro Ile
 290 295 300
 Trp Gly Val
 305

<210> 70
 <211> 339
 <212> PRT
 <213> Homo sapiens

<400> 70
 Met Ser Arg Ser Lys Arg Asp Asn Asn Phe Tyr Ser Val Glu Ile Gly
 1 5 10 15
 Asp Ser Thr Phe Thr Val Leu Lys Arg Tyr Gln Asn Leu Lys Pro Ile
 20 25 30
 Gly Ser Gly Ala Gln Gly Ile Val Cys Ala Ala Tyr Asp Ala Ile Leu
 35 40 45
 Glu Arg Asn Val Ala Ile Lys Lys Leu Ser Arg Pro Phe Gln Asn Gln
 50 55 60
 Thr His Ala Lys Arg Ala Tyr Arg Glu Leu Val Leu Met Lys Cys Val
 65 70 75 80
 Asn His Lys Asn Ile Ile Gly Leu Leu Asn Val Phe Thr Pro Gln Lys
 85 90 95
 Ser Leu Glu Glu Phe Gln Asp Val Tyr Ile Val Met Glu Leu Met Asp
 100 105 110
 Ala Asn Leu Cys Gln Val Ile Gln Met Glu Leu Asp His Glu Arg Met
 115 120 125
 Ser Tyr Leu Leu Tyr Gln Met Leu Cys Gly Ile Lys His Leu His Ser
 130 135 140
 Ala Gly Ile Ile His Arg Asp Leu Lys Pro Ser Asn Ile Val Val Lys

145		150		155		160
Ser Asp Cys Thr	Leu Lys Ile Leu Asp	Phe Gly Leu Ala Arg Thr Ala				
	165	170			175	
Gly Thr Ser Phe	Met Met Thr Pro Tyr Val Val Thr Arg Tyr Tyr Arg					
	180	185			190	
Ala Pro Glu Val Ile Leu Gly Met Gly Tyr Lys Glu Asn Val Asp Leu						
	195	200			205	
Trp Ser Val Gly Cys Ile Met Gly Glu Met Val Cys His Lys Ile Leu						
	210	215			220	
Phe Pro Gly Arg Asp Tyr Ile Asp Gln Trp Asn Lys Val Ile Glu Gln						
	225	230			235	240
Leu Gly Thr Pro Cys Pro Glu Phe Met Lys Lys Leu Gln Pro Thr Val						
	245	250			255	
Arg Thr Tyr Val Glu Asn Arg Pro Lys Tyr Ala Gly Tyr Ser Phe Glu						
	260	265			270	
Lys Leu Phe Pro Asp Val Leu Phe Pro Ala Asp Ser Glu His Asn Lys						
	275	280			285	
Leu Lys Ala Ser Gln Ala Arg Asp Leu Leu Ser Lys Met Leu Val Ile						
	290	295			300	
Asp Ala Ser Lys Arg Ile Ser Val Asp Glu Ala Leu Gln His Pro Tyr						
	305	310			315	320
Ile Asn Val Trp Tyr Asp Pro Ser Glu Ala Glu Ala Arg Ser Cys Lys						
	325	330			335	
Leu Phe Ser						

<210> 71
 <211> 178
 <212> PRT
 <213> Homo sapiens

<400> 71
 Ala Arg Ser Gly Phe Tyr Arg Gln Glu Val Thr Lys Thr Ala Trp Glu
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 Val Arg Ala Val Tyr Arg Asp Leu Gln Pro Val Gly Ser Gly Ala Tyr
 20 25 30
 Gly Ala Val Cys Ser Ala Val Asp Gly Arg Thr Gly Ala Lys Val Ala
 35 40 45
 Ile Lys Lys Leu Tyr Arg Pro Phe Gln Ser Glu Leu Phe Ala Lys Arg
 50 55 60

Ala Tyr Arg Glu Leu Arg Leu Leu Lys His Met Arg His Glu Asn Val
 65 70 75 80
 Ile Gly Leu Leu Asp Val Phe Thr Pro Asp Glu Thr Leu Asp Asp Phe
 85 90 95
 Thr Asp Phe Tyr Leu Val Met Pro Phe Met Gly Thr Asp Leu Gly Lys
 100 105 110
 Leu Met Lys His Glu Lys Leu Gly Glu Asp Arg Ile Gln Phe Leu Val
 115 120 125
 Tyr Gln Met Leu Lys Gly Leu Arg Tyr Ile His Ala Ala Gly Ile Ile
 130 135 140
 His Arg Val Ser Pro Gly Gly Glu Ala Ala His Gln Pro Ser Pro Ser
 145 150 155 160
 Ala Ile Pro Pro Pro Pro Arg Pro Thr Cys Glu Asp Val Met Gly Ser
 165 170 175
 Gly Cys

<210> 72
 <211> 648
 <212> PRT
 <213> Homo sapiens

<400> 72
 Met Ser Pro Phe Leu Arg Ile Gly Leu Ser Asn Phe Asp Cys Gly Ser
 1 5 10 15
 Cys Gln Ser Cys Gln Gly Glu Ala Val Asn Pro Tyr Cys Ala Val Leu
 20 25 30
 Val Lys Glu Tyr Val Glu Ser Glu Asn Gly Gln Met Tyr Ile Gln Lys
 35 40 45
 Lys Pro Thr Met Tyr Pro Pro Trp Asp Ser Thr Phe Asp Ala His Ile
 50 55 60
 Asn Lys Gly Arg Val Met Gln Ile Ile Val Lys Gly Lys Asn Val Asp
 65 70 75 80
 Leu Ile Ser Glu Thr Thr Val Glu Leu Tyr Ser Leu Ala Glu Arg Cys
 85 90 95
 Arg Lys Asn Asn Gly Lys Thr Glu Ile Trp Leu Glu Leu Lys Pro Gln
 100 105 110
 Gly Arg Met Leu Met Asn Ala Arg Tyr Phe Leu Glu Met Ser Asp Thr
 115 120 125

Lys	Asp	Met	Asn	Glu	Phe	Glu	Thr	Glu	Gly	Phe	Phe	Ala	Leu	His	Gln	
130						135					140					
Arg	Arg	Gly	Ala	Ile	Lys	Gln	Ala	Lys	Val	His	His	Val	Lys	Cys	His	
145					150					155					160	
Glu	Phe	Thr	Ala	Thr	Phe	Phe	Pro	Gln	Pro	Thr	Phe	Cys	Ser	Val	Cys	
				165					170					175		
His	Glu	Phe	Val	Trp	Gly	Leu	Asn	Lys	Gln	Gly	Tyr	Gln	Cys	Arg	Gln	
			180					185					190			
Cys	Asn	Ala	Ala	Ile	His	Lys	Lys	Cys	Ile	Asp	Lys	Val	Ile	Ala	Lys	
		195					200					205				
Cys	Thr	Gly	Ser	Ala	Ile	Asn	Ser	Arg	Glu	Thr	Met	Phe	His	Lys	Glu	
	210					215					220					
Arg	Phe	Lys	Ile	Asp	Met	Pro	His	Arg	Phe	Lys	Val	Tyr	Asn	Tyr	Lys	
225					230					235					240	
Ser	Pro	Thr	Phe	Cys	Glu	His	Cys	Gly	Thr	Leu	Leu	Trp	Gly	Leu	Ala	
				245					250					255		
Arg	Gln	Gly	Leu	Lys	Cys	Asp	Ala	Cys	Gly	Met	Asn	Val	His	His	Arg	
			260					265					270			
Cys	Gln	Thr	Lys	Val	Ala	Asn	Leu	Cys	Gly	Ile	Asn	Gln	Lys	Leu	Met	
		275					280					285				
Ala	Glu	Ala	Leu	Ala	Met	Ile	Glu	Ser	Thr	Gln	Gln	Ala	Arg	Cys	Leu	
	290					295					300					
Arg	Asp	Thr	Glu	Gln	Ile	Phe	Arg	Glu	Gly	Pro	Val	Glu	Ile	Gly	Leu	
305					310					315					320	
Pro	Cys	Ser	Ile	Lys	Asn	Glu	Ala	Arg	Pro	Pro	Cys	Leu	Pro	Thr	Pro	
				325					330					335		
Gly	Lys	Arg	Glu	Pro	Gln	Gly	Ile	Ser	Trp	Glu	Ser	Pro	Leu	Asp	Glu	
			340					345					350			
Val	Asp	Lys	Met	Cys	His	Leu	Pro	Glu	Pro	Glu	Leu	Asn	Lys	Glu	Arg	
	355						360					365				
Pro	Ser	Leu	Gln	Ile	Lys	Leu	Lys	Ile	Glu	Asp	Phe	Ile	Leu	His	Lys	
	370					375					380					
Met	Leu	Gly	Lys	Gly	Ser	Phe	Gly	Lys	Val	Phe	Leu	Ala	Glu	Phe	Lys	
385					390					395					400	
Lys	Thr	Asn	Gln	Phe	Phe	Ala	Ile	Lys	Ala	Leu	Lys	Lys	Asp	Val	Val	
				405					410					415		
Leu	Met	Asp	Asp	Asp	Val	Glu	Cys	Thr	Met	Val	Glu	Lys	Arg	Val	Leu	
			420					425					430			

Ser Leu Ala Trp Glu His Pro Phe Leu Thr His Met Phe Cys Thr Phe
 435 440 445
 Gln Thr Lys Glu Asn Leu Phe Phe Val Met Glu Tyr Leu Asn Gly Gly
 450 455 460
 Asp Leu Met Tyr His Ile Gln Ser Cys His Lys Phe Asp Leu Ser Arg
 465 470 475 480
 Ala Thr Phe Tyr Ala Ala Glu Ile Ile Leu Gly Leu Gln Phe Leu His
 485 490 495
 Ser Lys Gly Ile Val Tyr Arg Asp Leu Lys Leu Asp Asn Ile Leu Leu
 500 505 510
 Asp Lys Asp Gly His Ile Lys Ile Ala Asp Phe Gly Met Cys Lys Glu
 515 520 525
 Asn Met Leu Gly Asp Ala Lys Thr Asn Thr Phe Cys Gly Thr Pro Asp
 530 535 540
 Tyr Ile Ala Pro Glu Ile Leu Leu Gly Gln Lys Tyr Asn His Ser Val
 545 550 555 560
 Asp Trp Trp Ser Phe Gly Val Leu Leu Tyr Glu Met Leu Ile Gly Gln
 565 570 575
 Ser Pro Phe His Gly Gln Asp Glu Glu Glu Leu Phe His Ser Ile Arg
 580 585 590
 Met Asp Asn Pro Phe Tyr Pro Arg Trp Leu Glu Lys Glu Ala Lys Asp
 595 600 605
 Leu Leu Val Lys Val Arg Ser Glu Ala Lys Ser Val Phe Ile Arg Arg
 610 615 620
 Ala Leu Gly Leu Leu Val Ser Phe Leu Phe Leu Leu Val Ser Asn Leu
 625 630 635 640
 His Val Ala Asn Asn Asp Tyr Tyr
 645